

Exhibit HH

**ATLANTA**

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ANALYSIS REPORT
MAS Project # M70484
Linda Zimmerman's JBP Containers



Prepared by:

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February 24, 2020

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PROJECT SUMMARY

This report includes the results of analyses for the two Linda Zimmerman Johnsons' Baby Powder (JBP) samples that were submitted by the law firm of Simon Greenstone Panatier and received by MAS, LLC on May 16, 2019.

The two JBP Zimmerman samples were logged in at MAS on May 16, 2019 and assigned MAS laboratory project identification number M70484 and sample numbers 001 and 002, respectively. Figures 1 through 2 are representative images of the sample containers taken at MAS.

SAMPLE DESCRIPTION

A description of the received samples are as follows:

<u>MAS No.</u>	<u>Client No.</u>	<u>Date of Manuf.</u>	<u>Weight of Talcum Powder</u>	
			<u>Description</u>	<u>in Container</u>
M70484-001	SGP 487779	1994	JBP 15 oz.	260 grams
M70484-002	SGP 445997	2014	JBP 1.5 oz.	20 grams

The two Zimmerman JBP samples were analyzed for the possible presence of amphibole asbestos (tremolite & anthophyllite) by PLM (ISO & Blount) as well as ATEM with heavy liquid separation (HLS). Also, the two JBP Zimmerman JBP samples were analyzed for the presence of chrysotile asbestos using the HLS method developed by the Colorado School of Mines (CSM) provide to J&J in 1973.^{1,2}

OVERVIEW

The two Linda Zimmerman JBP containers were examined by polarizing light microscopy by both the ISO 22262-1 PLM (w/o HLS) and the Blount method with HLS. Additionally, the two JBP samples were analyzed by the CSM's method using HLS and iodine staining for the sample preparation.

For the analytical transmission electron microscopy (ATEM), the samples were first prepared by the ISO-22262-2 heavy liquid (HLS) talc analysis method. For the ATEM analysis, suspected amphibole

¹ Colorado School of Mines Research Institute February 26, 1973 Report Re: Mineralogical Examination of Five Talc Samples to W.H. Ashton from W.P. Reid and W.T. Caner

² Colorado School of Mines Research institute April 2, 1973 Report re: Mineralogical Examination of Four Samples for Tremolite and Chrysotile from W.P. Reid to W.H. Ashton

asbestos structures were analyzed by the three-step method: 1) morphology, 2) energy dispersive x-ray spectroscopy (EDXA) and 3) selected area electron diffraction (SAED), for the verification of fibrous amphibole asbestos.

The overall results showed that the two JBP samples were found to be below the detection limit for amphibole asbestos using the ISO 22262-1 & Blount PLM methods as well as for the ISO 22262-1&2 ATEM HLS method. For the PLM-CSM method, both of the Zimmerman JBP containers were found to be positive for chrysotile asbestos. The estimated chrysotile weight percent for JBP container M70484-001 was 0.01 to 0.10 wt.% and for M70484-002 was 0.001 to 0.01 wt.%

Additionally, fibrous talc was detected in each of the two samples (moderate to abundant) by the three different PLM methods (ISO, BL, & CSM).

MATERIALS & METHODS

Muffle Furnace

Approximately 1 to 2 grams of the two talcum powder (Sartorius Research Balance) was removed from each of the two JBP containers and placed in individual 12 ml glass scintillation vials. The scintillation vials were then placed in a Fisher Scientific Iso-temp muffle furnace Model #620 at 400°F for a minimum of 4 hours to remove any organic material.

PLM - ISO 22262-1 Method (w/o HLS Sample Preparation)

Approximately 100 milligrams from each of the two muffled JBP samples were analyzed by the ISO 22262-1 PLM method.³ Three mounts each of the two JBP samples were placed on two glass slides, a drop of the 1.602 refractive index fluid is placed onto each of the three JBP mounts, stirred with the point of a scalpel blade and then covered with an 18 x 18 mm glass cover slip. The entire area of the three coverslip mounts was examined (972 mm²). Positive identification of amphibole asbestos bundles is then done by morphology, refractive indices, elongation, angle of extinction and birefringence as described by the ISO 22262-1 PLM method.

If samples are positive for regulated asbestos structures, a visual estimation of the quantity of asbestos observed is based on visual calibration through review of past NVLAP proficiency rounds which are lab generated weight percent standards provided by RTI International. Visual calibration is augmented by the use of area percent charts.

³ ISO 22262-1: 2012E Air Quality Bulk Materials Part 1: Sampling and Qualitative Determination of Asbestos in Commercial Bulk Samples.

PLM – Blount Method (with HLS Sample Preparation)

An aliquot of approximately 100 mg (Sartorius Research Balance) from each of the two muffled JBP samples were placed into separate labeled Eppendorf micro-centrifuge tubes (MCT) (Premium 1.2mL MCT Graduated Tubes Cat. No. 02-408-12).⁴

Approximately 1.2 ml of HLS (Lithium heteropolytungstates solution, GeoLiquids, Inc., Cat. No. LST010 with a stated density 2.82 g/cc) was diluted with distilled water to a density of 2.810 as determined by a VWR Hydrometer, model number 34620-1109, was added to each MCT containing the JBP talcum powder samples and mixed with a disposable mixing rod for 10 to 20 seconds. The combined talc and HLS (density 2.810 grams/cc) samples were placed into a vacuum desiccator (JEOL EMDSC-U10A) to remove air bubbles for 3 minutes at a pressure of approximately 8 torr prior to centrifugation.

The MCT sample tubes were then placed in an Eppendorf micro-centrifuge (Model No. 2412D) set at 7,000 RPM for total of 10 minutes at room temperature. After removal of the MCT tubes from the centrifuge, the talc/heavy liquid was pipetted off the top of the centrifuge tubes, and distilled water was added back, mixed and re-centrifuged as described above. This step was repeated two more times. After the third centrifugation/heavy liquid removal step, the heavy particles were removed from the bottom of the centrifuge tubes with a pipette; several drops of water containing the heavy particles were transferred to a glass microscope slide and allowed to dry. The heavy particle residue on the glass slide was then analyzed by the ISO 22262-01 PLM method as described above.

In addition to the determination of regulated amphibole asbestos structures, each of the JBP samples were also examined for amphibole cleavage fragments and fibrous talc. The verification of fibrous talc was done with a RI fluid of 1.55.

PLM – CSM Method (with HLS Sample Preparation)

An aliquot of approximately 1 gram (Sartorius Research Balance) from each of the two JBP samples were placed into individual 12 ml glass scintillation vials then approximately 5 to 10 ml of 1.0% iodine solution (Betadine Lot:81180-128) is added mixed and inverted by hand for 5 to 10 seconds. The scintillation vial/talcum powder/iodine solution is then placed on a vortex mixer (Fisher-Scientific Model #232 for 5 to 10 seconds. After mixing the scintillation vials are then placed in a water bath

⁴ Process Mineralogy IX: The Minerals, Metals & Materials Society, 1990, A.M. Blount "Detection and Quantification of Asbestos and Other Trace Minerals in Powdered Industrial-Mineral Samples", pp. 227-270.

at 100°C for 1.5 to 2 hours. The talcum/iodine solution in the scintillation vial is rinsed onto a 47 mm MCE filter (0.4 micron pore size) with 15 ml of 50/50 solution of methanol and DI water. This step is repeated just DI water until the talcum powder on the filter turns from amber brown to white. This step usually takes 3 to 5 washes. The filter containing the talcum power is allowed to dry for 20 to 30 minutes.

CSM/HLS PLM Method

Approximately 200 grams of the iodine stained talcum powder, from each of the two JBP talcum powder samples is transferred to a 15 ml centrifuge tube (VWR 10026-076). Approximately 15 ml of HLS (Lithium heteropolytungstates solution, GeoLiquids, Inc., Cat. No. LST010 with a stated density 2.82 g/cc) was diluted with distilled water to a density of 2.72 as determined by a VWR Hydrometer, model number 34620-1109, was added to each VWR-T containing the JBP talcum powder samples and mixed with a disposable mixing rod for 10 to 20 seconds. The combined talc and HLS (density 2.72 grams/cc) samples were placed into a vacuum desiccator (JEOL EMDSC-U10A) to remove air bubbles for 3 minutes at a pressure of approximately 8 torr prior to centrifugation.

The VWR-Ts were then placed in a Clay Adams Dynac II centrifuge set at 500 RPM for total of 10 minutes at room temperature without braking, once the centrifuge comes a full stop the RPMs are reset to 1800 for 10 minutes without braking. After removal of the VWR-Ts from the centrifuge, the bottom heavy mineral pellet is flash frozen in liquid nitrogen and the supernatant light minerals/heavy liquid is decanted on to a new 47 mm MCE (0.4 micron pour size) was washed with approximately 15 ml distilled water. This step was repeated two more times. The final MCE filter is allowed to dry for 20 to 30 minutes. After drying, the talcum powder sample is provide to the PLM analyst.

Three mounts each of the two JBP samples were placed on two glass slides, a drop of the 1.55 refractive index fluid is placed onto each of the three JBP mounts, stirred with the point of a scalpel blade and then covered with an 18 x 18 mm glass cover slip. The entire area of the three coverslip mounts was examined (972 mm²). Positive identification of chrysotile asbestos bundles is then done by morphology, refractive indices, elongation, angle of extinction and birefringence as described by the ISO 22262-1 PLM method.

ATEM Sample Preparation: ISO 22262-2 (with HLS Sample Preparation)

Approximately 30 mg (Sartorius Research Balance) from each of the two JBP samples were placed into separate, labeled Eppendorf micro-centrifuge tubes (MCT) (Premium 1.2 ml MCT Graduated Tubes Cat. No. 02-408-12).⁵

Approximately 1.2 ml of heavy liquid (Lithium heteropolytungstates solution, GeoLiquids, Inc., Cat. No. LST010 density 2.85 g/cc) was added to each MCT containing the talc samples, prepped and mixed with a disposable mixing rod for approximately 10 to 20 seconds. The combined talc and LST heavy liquid samples were then placed into a vacuum desiccator (JEOL EMDSC-U10A) to remove air bubbles for 15 minutes at a vacuum pressure of approximately 8 torr prior to centrifugation.

The two MCT sample tubes were placed in an Eppendorf micro-centrifuge (Model No. 2412D) set at 9,000 RPM for a total of 90 minutes at room temperature. After removal of the MCT tubes from the centrifuge, the tubes were flash frozen in liquid nitrogen, and the MCT tips were immediately removed with a pre-cleaned 6-inch steel cleaver into clean 42 ml flat bottom disposable centrifuge tubes.

Deionized water was added to the centrifuge tubes to bring the volume to approximately 42 ml. The 42 ml centrifuge tubes were capped and inverted by hand 2 times to distribute the collected material in the bottom of the MCT tips. The 42 ml mixtures were then immediately and continuously filtered through a 47 mm Polycarbonate filters (PC) with a 0.22µm pore size. After the mixtures were filtered, the excess heavy liquids were washed through the filters with the addition of approximately 100 ml of deionized water. The prepared PC filters were placed in new disposable plastic 47mm petri dishes and allowed to dry at ambient room temperature in a HEPA hood for a minimum of 2 hours. The processed PC filter samples were directly prepped onto 100 µm TEM size grids (2 for analysis and 1

for archive) using the standard TEM filter preparation protocol for PC filters.^{6,7, 8, 9, 10, 11}

ATEM Amphibole Asbestos Analysis: ISO 22262-1 & 2

For the ATEM analysis, 100 grid openings were analyzed between two grids (20 openings per grid). JEOL 1200EX ATEMs equipped with either a Noran or an Advanced Analysis Technologies (light element) energy dispersive x-ray analyzer (EDXA) were employed for this analysis.

The sample was analyzed at a screen magnification of 20,000X. Verification of regulated asbestos structures is done in the ATEM by the following three steps:

Morphology (Step 1)

For the determination of the fibrous morphology (step 1) for any potential regulated amphibole asbestos structures in the sample was done by the standard ATEM methodology.^{1,3} For morphology, fibers and bundles, the potential asbestos structures must have substantially parallel sides with an aspect ratio of 2:1 or greater, and at least 0.2 µm in length.

Regulated Amphibole Asbestos Verification (Steps 2 & 3)

For potential fibrous asbestos structures that fit the above morphology criteria, they are analyzed in the ATEM by EDXA for the fiber/bundle chemistry (step 2) and selected area electron diffraction (SAED) for the appropriate crystalline lattice measurements for regulated amphibole asbestos.^{1,3} The detection limit for this method, as specified by the ISO 22262-1, is the findings of either 1 fiber or 1 bundle in the analysis.

Process Laboratory Blanks

⁶ ISO 22262-2: 2014E Air Quality-Bulk Materials Part 2: Quantitative Determination of Asbestos by Gravimetric and Microscopical Methods.

⁷ D2722-09 "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Loading.

⁸ D2726-02 "Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust Loading by Transmission Electron Microscopy for Asbestos Mass Surface.

⁹ ISO 10312 1992-02-01, "Ambient Air Determination of Asbestos Fibers-Direct-Transfer Transmission Electron Microscopy Method.

¹⁰ ISO 13794 1999 07-12, "Ambient Air-Determination of Asbestos Fibers-Indirect-Transfer Transmission Electron Microscopy Method.

¹¹ U.S. Environmental Protection Agency (USEPA) 1987. Asbestos Hazard Emergency Response Act, 40 CFR Part 763, Appendix A to Subpart E, USEPA, Washington D.C.

For the one set of JBP talcum powder samples that were prepared by the heavy liquid method, one process laboratory blank (sample M70848-000) was run concurrently at time of preparation. The process blank PC filter was prepared in the same exact same manner as the talc samples (with and with-out heavy liquid, filtration on PC filters, etc.) but without any talc material. For the ATEM analysis, 100 grid openings were analyzed for each blank.

RESULTS

MAS ISO-22262-1 PLM Method for Amphibole Asbestos

The ISO 22262-1 PLM analysis showed that out of the two JBP containers samples analyzed by MAS, none had detectable amounts of regulated amphibole asbestos in the two JBP samples. Also, neither sample contained amphibole asbestos mineral cleavage fragments, but both samples did show abundant amounts of fibrous talc.

PLM/Blount Method for Amphibole Asbestos

The Blount/PLM method showed that out of the two containers analyzed by MAS, none had detectable amounts amphibole asbestos in the two JBP samples. Also, neither sample contained amphibole asbestos mineral cleavage fragments, but both samples had an estimated moderate concentration of fibrous talc.

Fibrous Talc

As stated above, both the ISO-PLM & Blount/PLM analysis showed that the two JBP samples contained fibrous talc that was described as abundant to moderate concentration.

The fibrous talc component, for each of the ISO & Blount JBP samples, was verified using 1.55 RI fluid with dispersion staining. This analysis was only a survey, time of analysis was between 20 to 30 minutes. It was not designed to detect trace levels of chrysotile for both size of the chrysotile structure or length of time that would be required for a full analysis.

Colorado School of Mines PLM Method HLS for the Detection of Chrysotile

For the PLM-CSM method, both of the Zimmerman JBP containers were found to be positive for chrysotile asbestos. The estimated chrysotile weight percent for JBP container M70484-001 was 0.01 to 0.10 wt.% and for M70484-002 was 0.001 to 0.01 wt.%

Additionally, fibrous talc was detected in each of the two samples (moderate) by the CSM-PLM methods.

ATEM ISO 22262-2 Amphibole Asbestos Method

The ISO 22262-2 ATEM heavy liquid separation method showed that the two JBP containers were non-detects for amphibole asbestos fibers and bundles. If amphibole asbestos was present, it was below our detection limit of <5700 f-b/gram of talcum powder.

Process Blanks

The one process blank, there was no asbestos structures, cleavage fragments or fibrous or platy talc was detected.

A summary of the overall MAS analysis results are shown in Tables 1.

Table 1. Asbestos Analysis Results

Sample Number	Client Sample Number	Year of Manufacture	ATEM Amphibole Asbestos F-B /gram	ATEM Chrysotile Asbestos F-B/gram	ISO PLM w/o HLS amphibole % VAE	PLM/Blount CSM w/ HLS chrysotile % VAE	Fibrous Talc ISO & BL PLM
M70484-001	SGP 447779	1994	<5700	In-progress	NDA*	0.01 to 0.10	Moderate to Abundant
M70484-002	SGP 445997	2014	<5700	In-progress	NDA	0.001 to 0.01	Moderate to Abundant

*NDA: No Fibrous Amphibole Asbestos Structures Detected

DISCUSSION/CONCLUSION

ISO-PLM 22262-1 & Blount/PLM Methods

For the ISO & Blount/PLM analysis performed by MAS on the two JBP talcum powder samples found that both samples were non-detects. Also, neither sample detected asbestos mineral cleavage fragments but did detect fibrous talc at an estimated concentration range of between moderate to abundant.

Colorado School of Mines HLS for the Detection of Chrysotile

Using the CSM HLS method for both the Zimmerman JBP samples demonstrated that the use of HLS at a density of 2.72 g/cc can concentrate the chrysotile if present at a detection limit of 0.0001 wt. % or above by PLM. This analysis is based, for the most part, on the work done by CSM in the early 1970's that was provided to J&J in two reports that were dated February & April of 1973.

These two JBP positive chrysotile findings is the first time that MAS has detected chrysotile asbestos in J&J's cosmetic talc products. For these two JBP samples, the 1994 container (Vermont) had a chrysotile concentration range of between 0.01 to 0.1 wt. percent. The 2014 JBP container had a chrysotile asbestos concentrated range of between 0.001 to 0.01 wt. percent.

Our positive chrysotile PLM findings, for the 1994 JBP Vermont talc source, is consistent with CSM's PLM analysis of Vermont talc in the early 1970's, as shown in the two CSM documents reference 1 & 2 to this report. Also, the this result is consistent with J&J's early attempt to remove both chrysotile and tremolite during the flotation process for their Vermont talc source as well as a number of McCrone TEM analysis were chrysotile was detected, but blamed their positive chrysotile results on "background contamination" in their laboratory.

Also, MAS's positive chrysotile PLM results for the Zimmerman 2014 JBP container, a Chinese source talc product, is consistent with the results of recent JBP testing by AMA Analytical, the RJ Lee Group, and probably Bureau Veritas of talc samples from the same source mine.

There is no indication or documents that demonstrates that J&J ever shared the CSM heavy liquid separation methods for either chrysotile or amphibole asbestos to the FDA or CSM's positive results for either chrysotile or amphibole asbestos from using their heavy liquid separation methods.

ATEM HLS for Chrysotile Asbestos

MAS is still working on the method development for detection of chrysotile asbestos by ATEM using the CSM HLS method.



William E. Longo Ph.D.
CEO MAS LLC

Section 2

MAS, LLC.
CHAIN-OF-CUSTODY

CLIENT: Simon Greenstone Panatier Bartlett
CONTACT: Chris Panatier
PHONE: (214) 276-7680
CLIENT JOB NAME: 14-2346 Linda Zimmerman
CLIENT JOB#: 14-2346
CLIENT DOC(S): Letter of Transmittal,COC,photos
FAX NUMBER:

MAS JOB: M70484
LOGIN DATE: 5/16/2019
SUBMITTED BY: Yvonne Champagne
TRANSPORT: FedEx 775227065202
RECEIVED BY: Shaquanna Lytle
CONDITION: Good

MAS LOCATION:	Rm 123	DATE/BY:	5/28/19 JAM
PREP BY	JAM	DATE:	6/13/19 thru 2/13/2020
ANALYSIS BY:	PH	DATE:	2/12/19 to 2/22/20
QC BY:	PH	DATE:	2/24/20
REPORT BY	JAM	DATE:	2/24/2020
REVIEWED BY	JAM	DATE:	2/24/2020
		FINAL DISPOSITION BY	
		LOCATION:	Legal Talc Storage Rm 123
		DATE:	

MAS #	CLIENT ID	VOLUME	TYPE MATERIAL	MAS #	CLIENT ID	VOLUME	TYPE MATERIAL
001	SGP 487779		Johnson & Johnson Baby Powder 15oz				
LOCATION							
2	SGP 445997		Johnson & Johnson Baby Powder 1.5oz				
LOCATION							

SAMPLE(S) RETURNED BY: *NA* DATE: _____
FEDEX TRACKING #: _____
RECEIVED BY: _____ DATE: _____

COMMENT *JAM Analyses -* DATE: *2/24/2020*

MAS, LLC.
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Suwanee, Georgia 30024

M70484

(770) 866-3200

1/13/14 Revision 0

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MAS, LLC.
CHAIN-OF-CUSTODY

CLIENT: Simon Greenstone Panatier Bartlett
CONTACT: Chris Panatier
PHONE: (214) 276-7680
CLIENT JOB NAME: 14-2346 Linda Zimmerman
CLIENT JOB#: 14-2346
CLIENT DOC(S): Letter of Transmittal,COC,photos
FAX NUMBER:

MAS JOB: M70484
LOGIN DATE: 5/16/2019
SUBMITTED BY: Yvonne Champagne
TRANSPORT: FedEx 775227065202
RECEIVED BY: Shaquanna Lytle
CONDITION: Good

MAS LOCATION:	Rm 123	DATE/BY:	5/28/19 JAM
PREP BY	JAM	DATE:	6/13/19 thru 6/17/19
ANALYSIS BY:	JGC	DATE:	7-23-19 thru 7-24-19
QC BY:	JGC	DATE:	7-29-19
REPORT BY	HL	DATE:	2-24-2020
REVIEWED BY	AK	DATE:	2-24-2020
		FINAL DISPOSITION BY	
		LOCATION:	LEGAL ARCHIVE Rm. 123
		DATE:	(2)

MAS #	CLIENT ID	VOLUME	TYPE MATERIAL	MAS #	CLIENT ID	VOLUME	TYPE MATERIAL
001	SGP 487779		Johnson & Johnson Baby Powder 15oz				
LOCATION							
2	SGP 445997		Johnson & Johnson Baby Powder 1.5oz				
LOCATION							

SAMPLE(S) RETURNED BY: n/a DATE: _____
FEDEX TRACKING #: _____
RECEIVED BY: W DATE: _____
8/1/2019

COMMENT TEM ANALYSIS

MAS, LLC.
3945 Lakefield Court
Suwanee, Georgia 30024
(770) 866-3200

1/13/14 Revision 0

M70484

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CHAIN OF CUSTODY

Project No. or Identification: Linda Zimmerman's Johnson's Baby Powder – 15oz

Sample ID	Other ID	Description
SCP 487779	0876RB1	One (1) 15 oz white bottle of Johnson's Baby Powder

Relinquished by (sign): <i>Linda Zimmerman</i>	Received by (sign):
Delivery Method: Hand delivered	Delivery Method: Hand delivered
Date: 1/11/19 Printed name: Linda Zimmerman	Date: 1/11/19 Printed name: Conor Nideffer
Company:	Company:

Relinquished by (sign): <i>Conor Nideffer</i>	Received by (sign): <i>Christie Dutton</i>
Delivery Method: Fed Ex	Delivery Method: Fed Ex
Date: 5-6-19 Printed name: Conor Nideffer	Date: 5-7-19 Printed name: Christie Dutton
Company: SCP	Company: Simon Greenstone

Relinquished by (sign): <i>Yvonne Champagne</i>	Received by (sign): <i>S. Lytle</i>
Delivery Method: Fed-ex	Delivery Method: Fed Ex
Date: 5/15/19 Printed name: Yvonne Champagne	Date: 05-16-19 Printed name: Shaquanna Lytle
Company: Simon Greenstone	Company: mAS

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

CHAIN OF CUSTODY

Project No. or Identification: Linda Zimmerman's Johnson's Baby Powder – 1.5oz

Sample ID	Other ID	Description
SBP 4459A1	1045RA	One (1) 1.5 oz white bottle of Johnson's Baby Powder

Relinquished by (sign): <i>Linda Zimmerman</i>	Received by (sign):
Delivery Method: Hand delivered	Delivery Method: Hand delivered
Date: 1/11/19 Printed name: Linda Zimmerman	Date: 1/11/19 Printed name: Conor Nideffer
Company:	Company:

Relinquished by (sign): <i>Conor Nideffer</i>	Received by (sign): <i>Christi Dutton</i>
Delivery Method: FedEx	Delivery Method: FedEx
Date: 5-6-19 Printed name: Conor Nideffer	Date: 5-7-19 Printed name: Christi Dutton
Company: <i>SGP</i>	Company: <i>Simon Greenstone</i>

Relinquished by (sign): <i>Yvonne Champagne</i>	Received by (sign): <i>S Lytle</i>
Delivery Method: FedEx	Delivery Method: FedEx
Date: 5/15/19 Printed name: Yvonne Champagne	Date: 05-16-19 Printed name: Shalavanna Lytle
Company: <i>Simon Greenstone</i>	Company: <i>mas</i>

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

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Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

Relinquished by (sign):	Received by (sign):
Delivery Method:	Delivery Method:
Date: Printed name:	Date: Printed name:
Company:	Company:

JEFFREY B. SIMON (CA, NY, TX)
 DAVID C. GREENSTONE (CA, NY, TX)
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 STUART J. PURDY (CA)
 JAY E. STUENKE (TX)
 LISA M. BARLEY (CA)
 LEAH C. KAGAN (CA, NJ, NY)
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SIMON GREENSTONE PANATIER

TRIAL LAWYERS

ATTORNEYS & COUNSELORS AT LAW
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www.SGPTRIAL.com

PLEASE RESPOND TO THE TEXAS OFFICE

05/15/19

VIA FED-EX: 7752 2706 5202

Dr. William Longo
 Material Analytical Services
 3945 Lakefield Court
 Suwanee, GA 30024
 (770) 866-3208

Re: Analysis for Presence of Asbestos Fibers in Talc Product
 SGP 487779
 SGP 445997

Dear Dr. Longo,

Enclosed please find the following cosmetic talc sample(s) for analysis:

SGP 487779; Johnson's Baby Powder, 15oz
SGP 445997; Johnson's Baby Powder, 1.5oz

Below are photographs of the product(s) upon original receipt.

Enclosed please also find labels containing an SGP sample number for each product. We have handwritten the SGP sample number on each zip lock bag. Please match up the bag to its respective label and we ask that you affix it to the correct product. This sample number helps with our internal records and tracking of the product.

Please reference our sample number(s) in any report you may generate in this matter, in addition to your own MAS identification number(s).

See following page for photographs...

 SCANNED
5-16-19 SL

Shipping Package Inspected By:
 1. SL Date 5-16-19
 2. JL Date 05-16-2019

LONG BEACH:
 3780 Kilroy Airport Way, Suite 540
 Long Beach, California 90806
 562-590-3400 (T)
 562-590-3412 (F)

DALLAS (Primary Office):
 1201 Elm St., Suite 3400
 Dallas, Texas 75270
 214-276-7680 (T)
 214-276-7699 (F)

NEW YORK:
 5 Penn Plaza, Suite 2308
 New York, New York 10001
 212-634-1690 (T)
 214-276-7699 (F)



These are opened products that have been used by our client Linda Zimmerman.

Once you have concluded testing of this product(s), please return it and all paperwork (pictures, chain of custody, etc.) to my attention in our Dallas office. If you have any questions or concerns, please do not hesitate to contact me at your convenience.

Sincerely,


Yvonne Champagne
Administrative Assistant

Enclosures

ORIGIN ID:KIPA
YVONNE CHAMPAGNE (214) 276-7680
1201 ELM ST.
STE. 3400
DALLAS TX 75270
UNITED STATES US

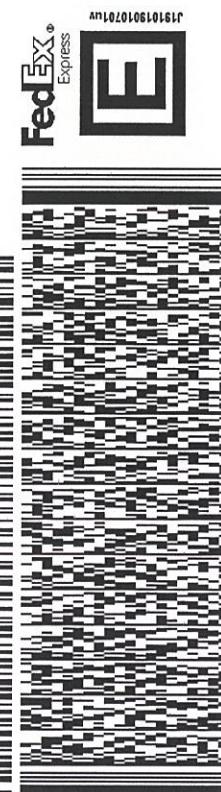
TO DR. WILLIAM LONGO
MATERIAL ANALYTICAL SERVICES
3945 LAKEFIELD COURT

SUWANEE GA 30024
(770) 866-2208
INV. #
PO#

REF: ZIMMERMAN LINDA 01-CA

DEPT:

565J1/D66C/23AD



THU - 16 MAY 3:00P
STANDARD OVERNIGHT

TRK# 7752 2706 5202
0201

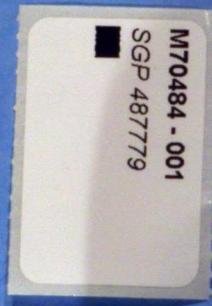
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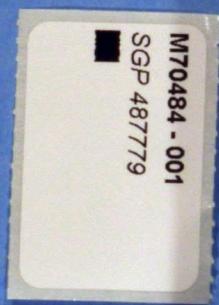
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GA-US ATL

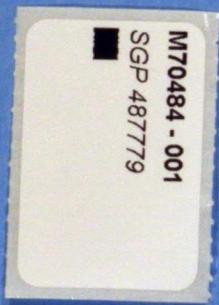


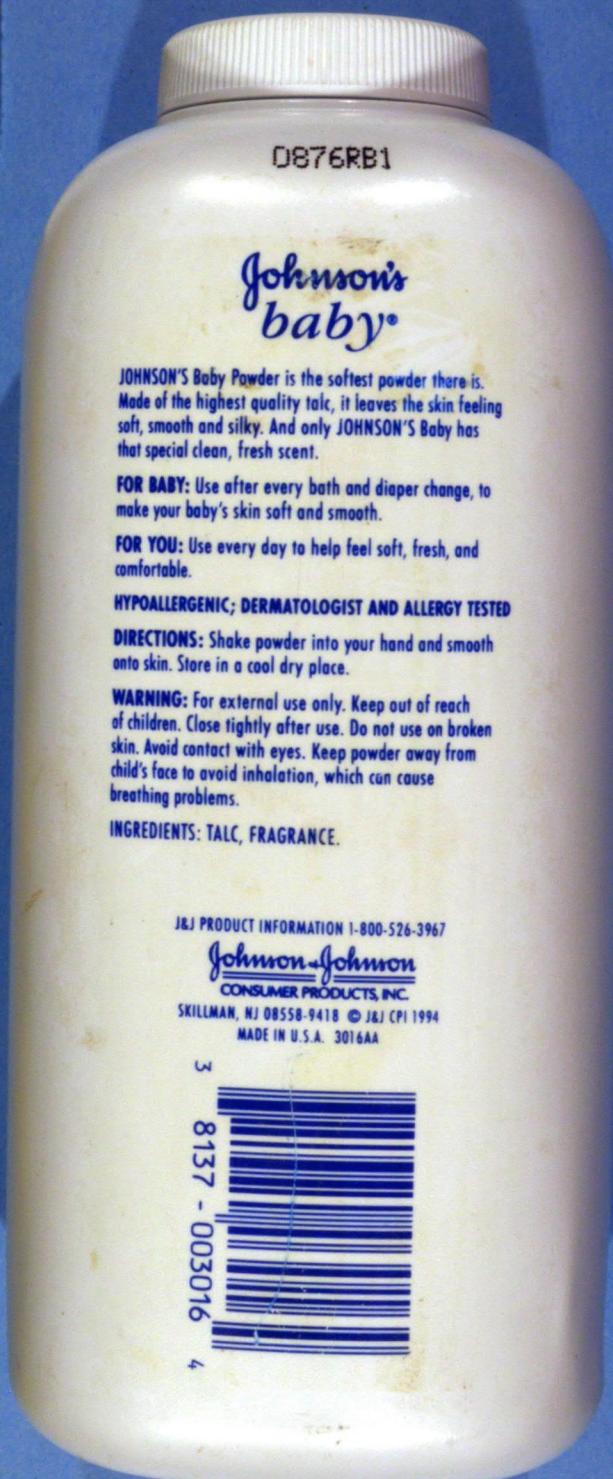
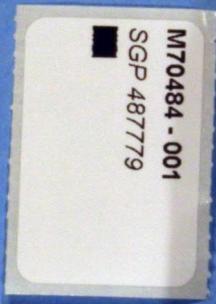
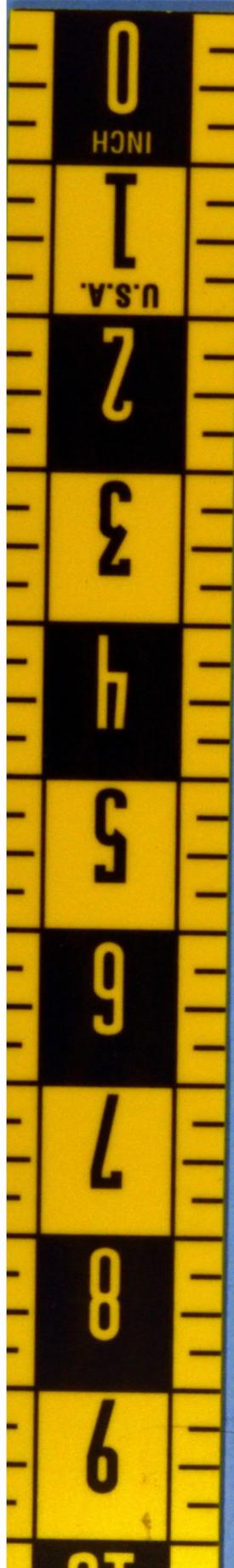
SCANNED
5-1-5

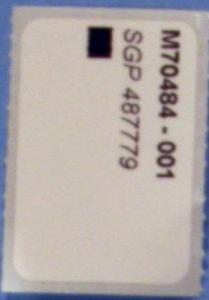
Section 3

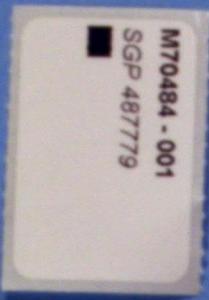












**MAS, LLC
PLM ANALYSIS**

Proj#-Spl# M70484- 001ISO **Analyst** Paul Hess **Date** 6/17/2019
ClientName Simon Greenstone Panatier Bartlett **ClientSpl** SGP 487779
Location
Type_Mat Johnson & Johnson Baby Powder 15oz
Gross Off-white powder **% of Sample** 100
Visual

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology			
Pleochroism			
Refract Index			
Sign^			
Extinction			
Birefringence			
Melt			
Fiber Name			

ASBESTOS MINERALS

EST. VOL. %
NO ASBESTOS OBSERVED

Chrysotile.....
Amosite.....
Crocidolite.....
Tremolite/Actinolite.....
Anthophyllite.....

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55 ***

NON FIBROUS COMPONENTS

Opaques	X
Talc	X
Mineral grains	X
_____	_____

Binder Description _____

Comments X = Materials detected. *** Abundant Fibrous Talc observed.

The method detection limit is 1% unless otherwise stated.

**MAS, LLC
PLM ANALYSIS**

Proj#-Spl# M70484- 001BL **Analyst** Paul Hess **Date** 6/19/2019

ClientName Simon Greenstone Panatier Bartlett **ClientSpl** SGP 487779

Location

Type_Mat Johnson & Johnson Baby Powder 15oz

Gross Off-white debris on slide **% of Sample** 100

Visual

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology			
Pleochroism			
Refract Index			
Sign^			
Extinction			
Birefringence			
Melt			
Fiber Name			

ASBESTOS MINERALS**EST. VOL. %**

NO ASBESTOS OBSERVED

Chrysotile.....

Amosite.....

Crocidolite.....

Tremolite/Actinolite.....

Anthophyllite.....

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55 ***

.....

.....

.....

.....

NON FIBROUS COMPONENTS

Opaques	X
Talc	X
Mineral grains	X
.....

Binder Description _____

Comments X = Materials detected. *** Moderate amount of Fibrous Talc observed.

The method detection limit is 1% unless otherwise stated.

MAS, LLC
PLM ANALYSIS

Proj#-Spl# M70484- 001HLM Analyst Paul Hess Date 2/21/2020
ClientName Simon Greenstone Panatier Bartlett ClientSpl SGP 487779
Location _____
Type_Mat Johnson & Johnson Baby Powder 15oz
Gross White debris on filter % of Sample 100
Visual _____

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology	wavy		
Pleochroism	none		
Refract Index	1.570/1.561		
Sign^	positive		
Extinction	parallel		
Birefringence	low		
Melt	no		
Fiber Name	Chrysotile		

ASBESTOS MINERALS

EST. VOL. %

Chrysotile..... 0.01 to 0.10
Amosite.....
Crocidolite.....
Tremolite/Actinolite.....
Anthophyllite.....

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55 ***

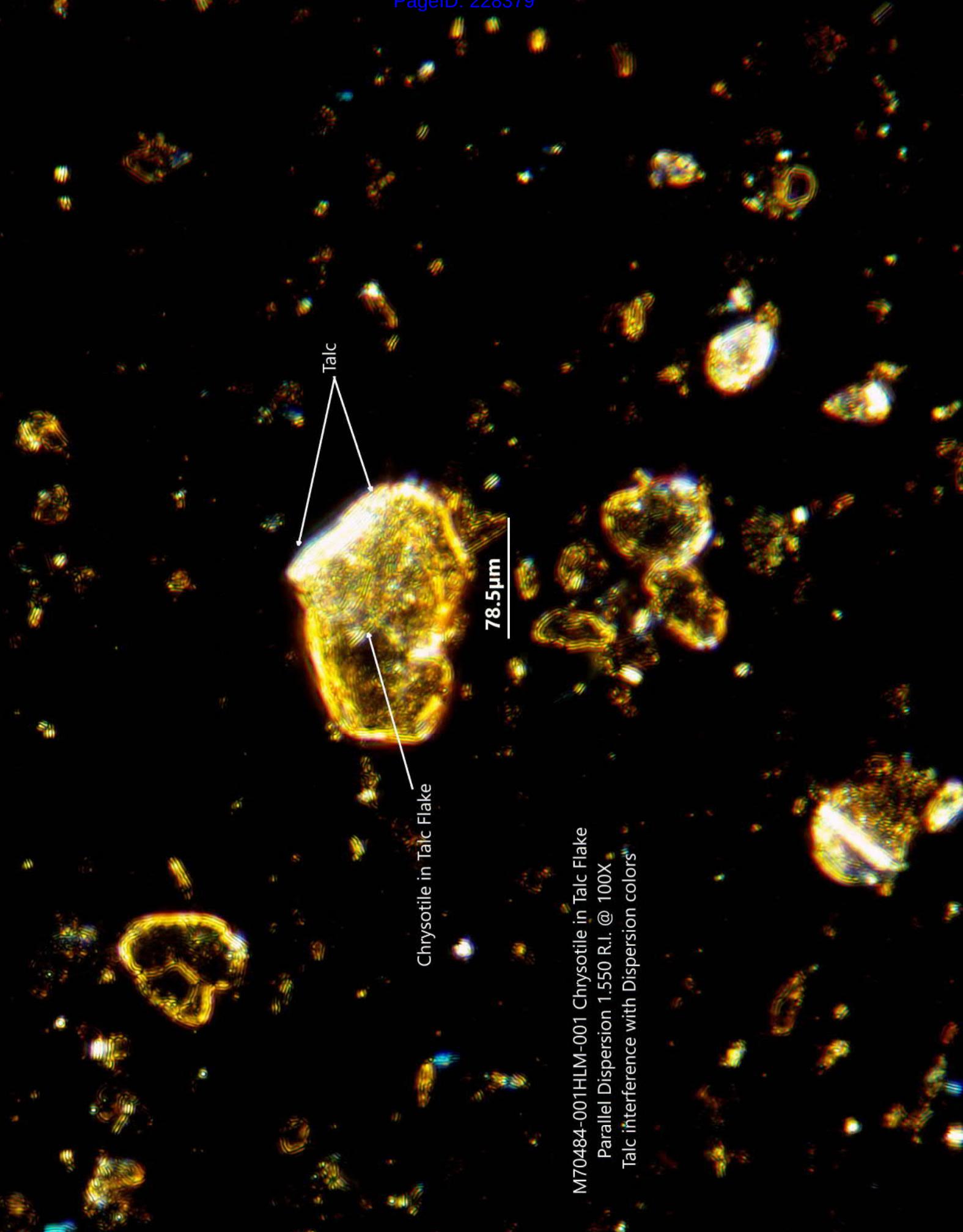
NON FIBROUS COMPONENTS

Opacites X
Talc X
Mineral grains X

Binder Description _____

Comments Chrysotile asbestos observed. X = Materials detected. *** Moderate amount of Fibrous Talc observed.

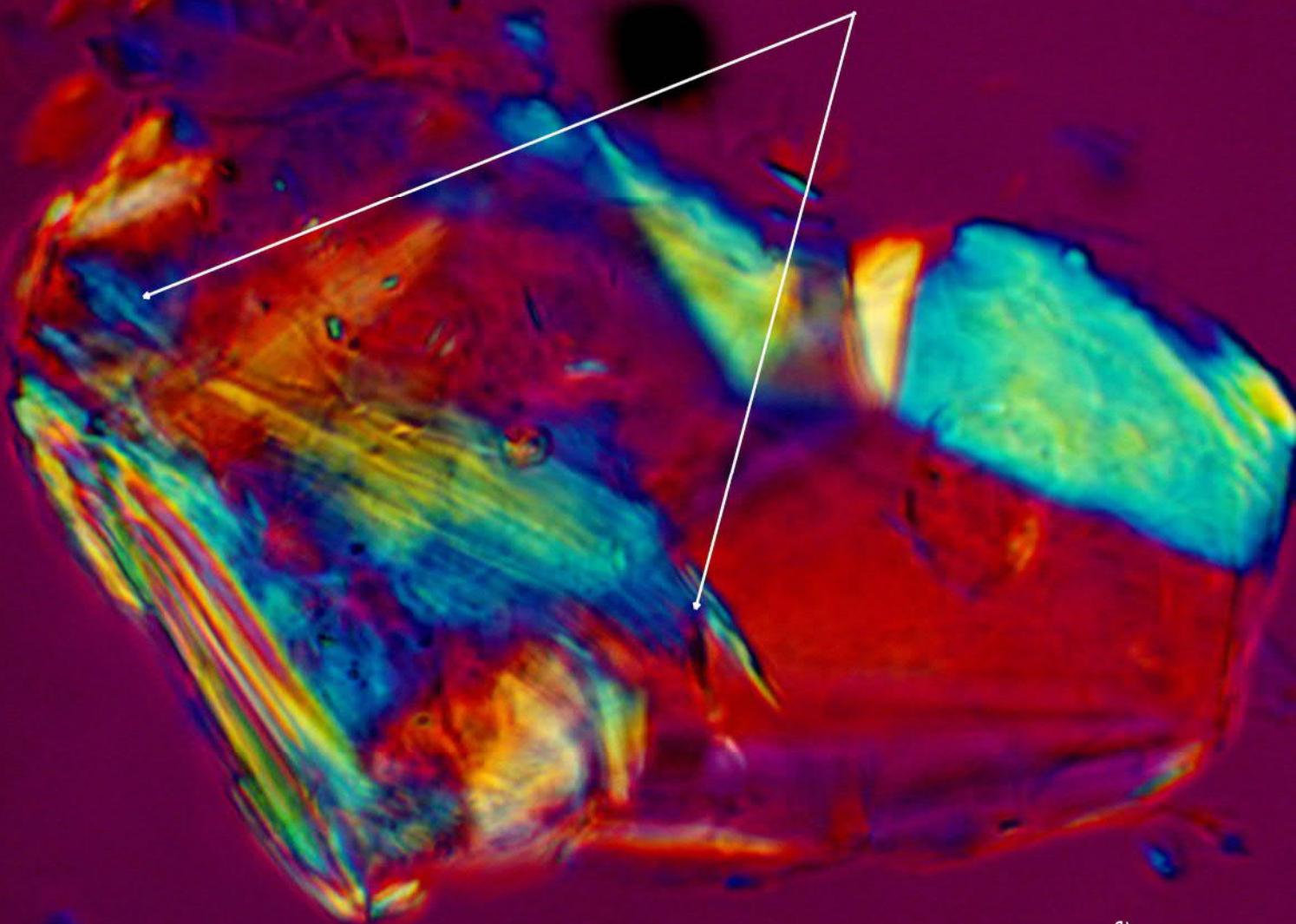
The method detection limit is 1% unless otherwise stated.



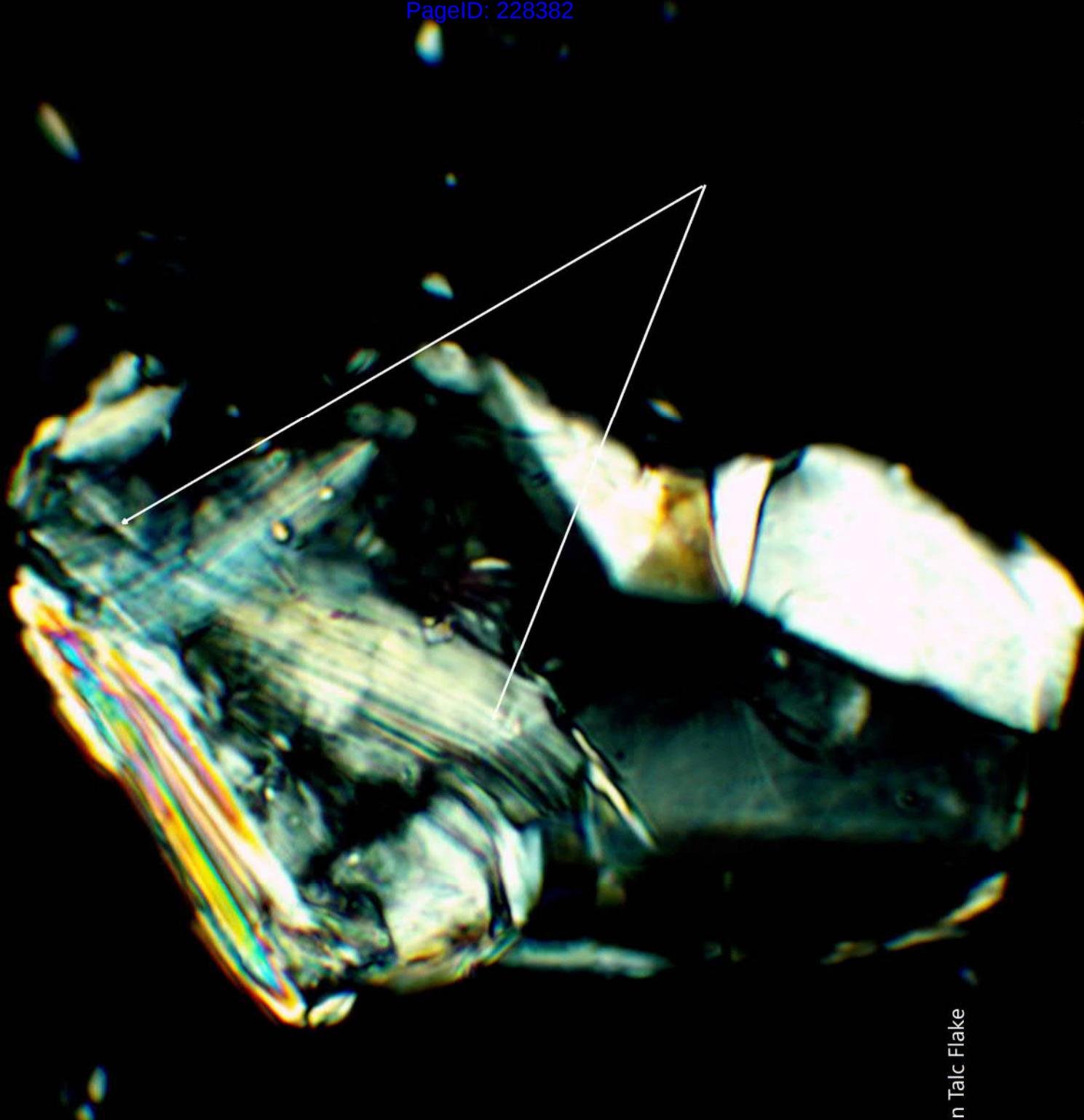
M70484-001HLM-001 Chrysotile in Talc Flake
Parallel Dispersion 1.550 R.I. @ 100X
Talc interference with Dispersion colors

M70484-001HLM-001 Chrysotile in Talc Flake
Perpendicular Dispersion
Talc interference with dispersion colors

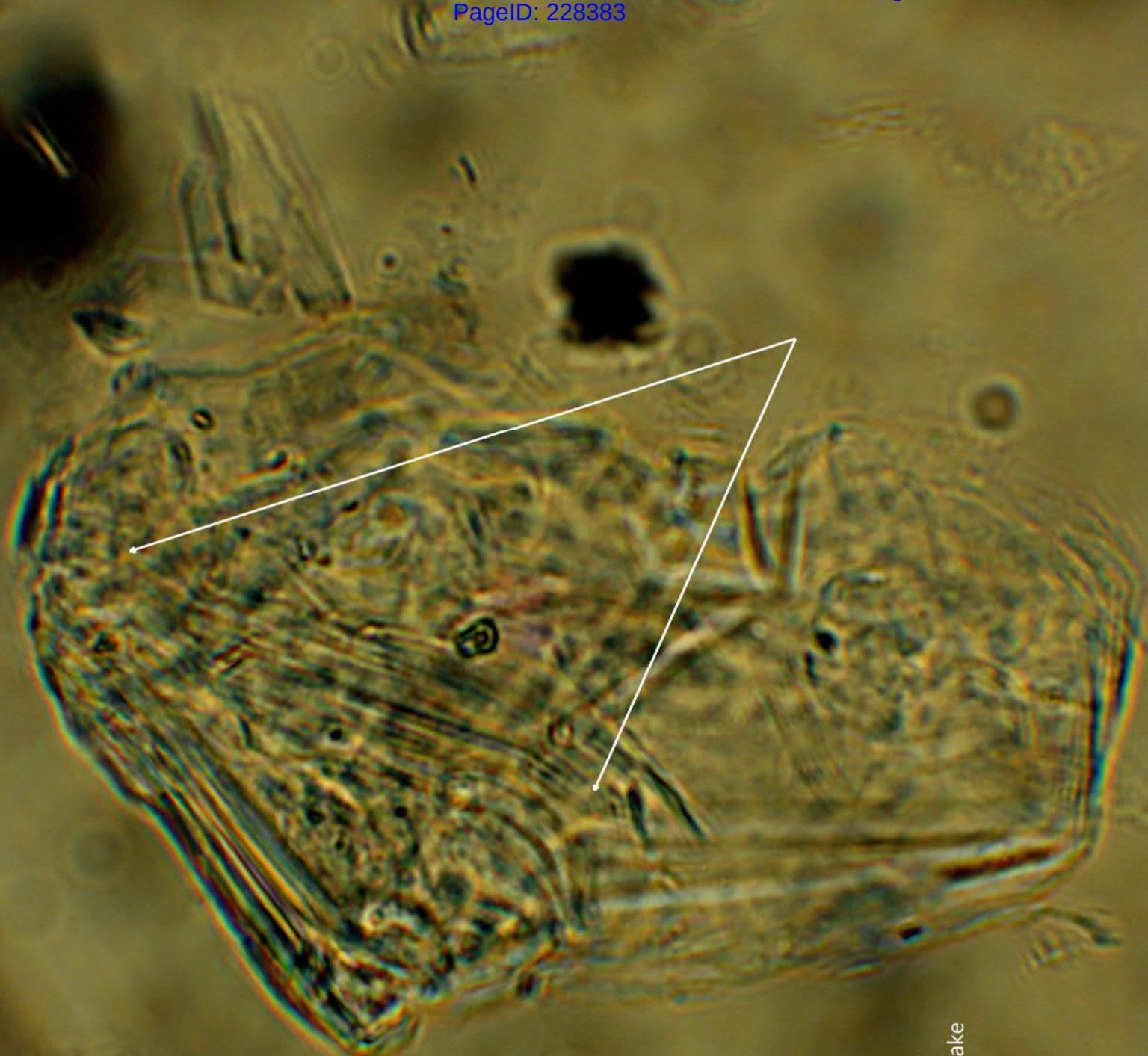
A polarized light micrograph showing numerous small, bright, yellowish-green talc flakes scattered against a dark background. A single, larger, irregularly shaped talc flake is highlighted in the center-left. Within this larger flake, several small, bright, multi-colored hexagonal inclusions are visible, characteristic of chrysotile. A thin white line points from the text label to one of these inclusions.



M70484-001HLM-001 Chrysotile in Talc Flake
Elongation @ 400X



M70484-001HLM-001 Chrysotile in Talc Flake
Crossed Polars

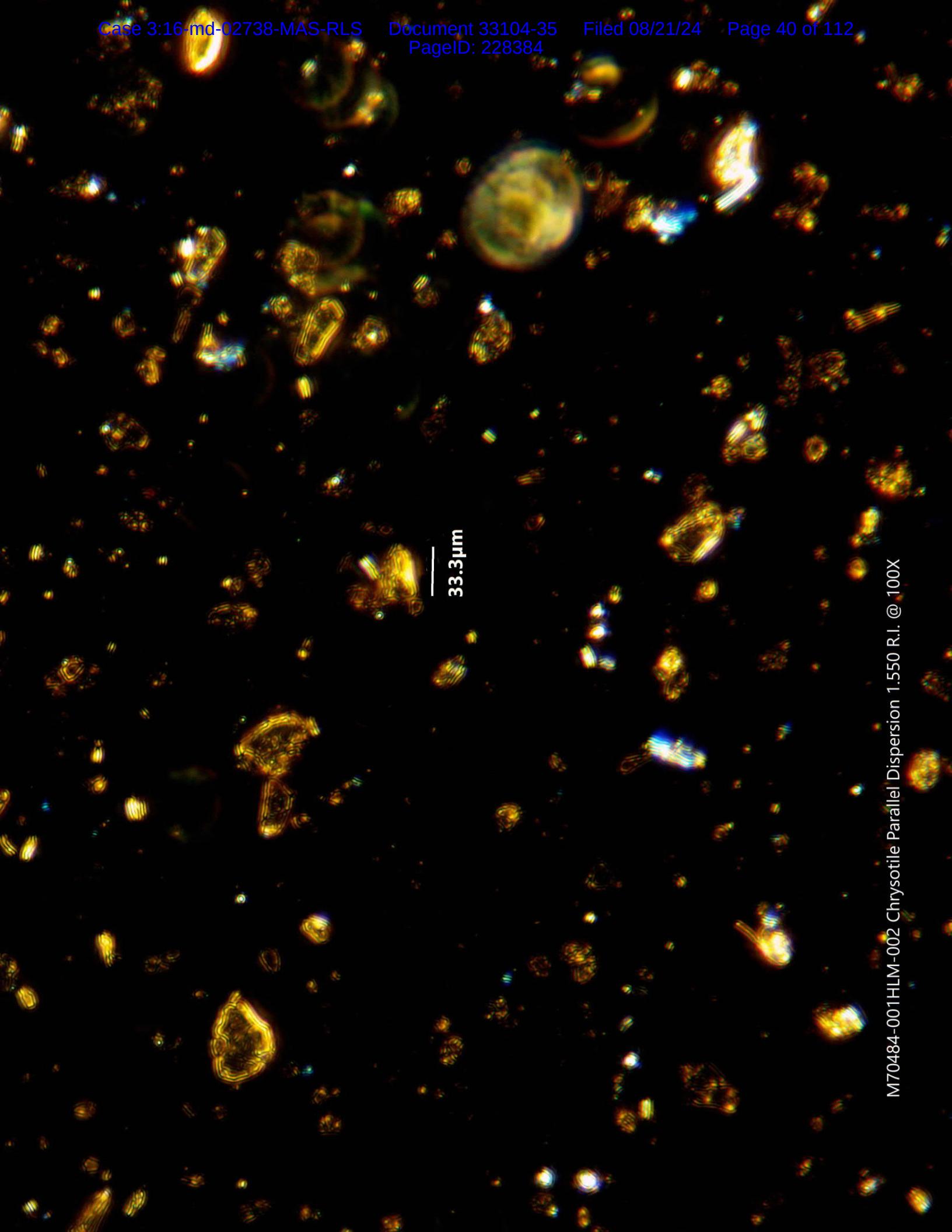


M70484-001HLM-001 Chrysotile in Talc Flake

Polarizer out

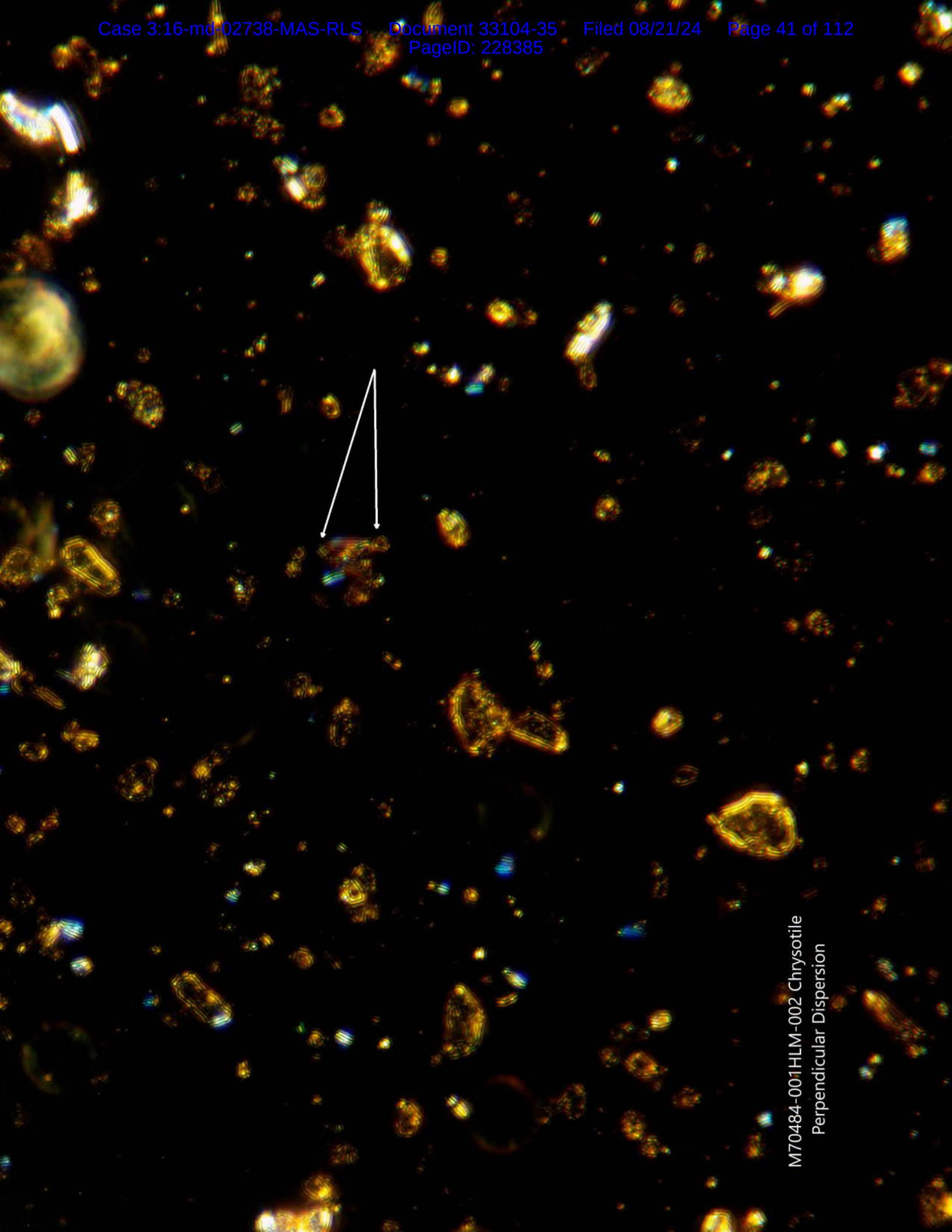
Aperture Diaphragm 95% closed

1.550 R.I. @ 400X

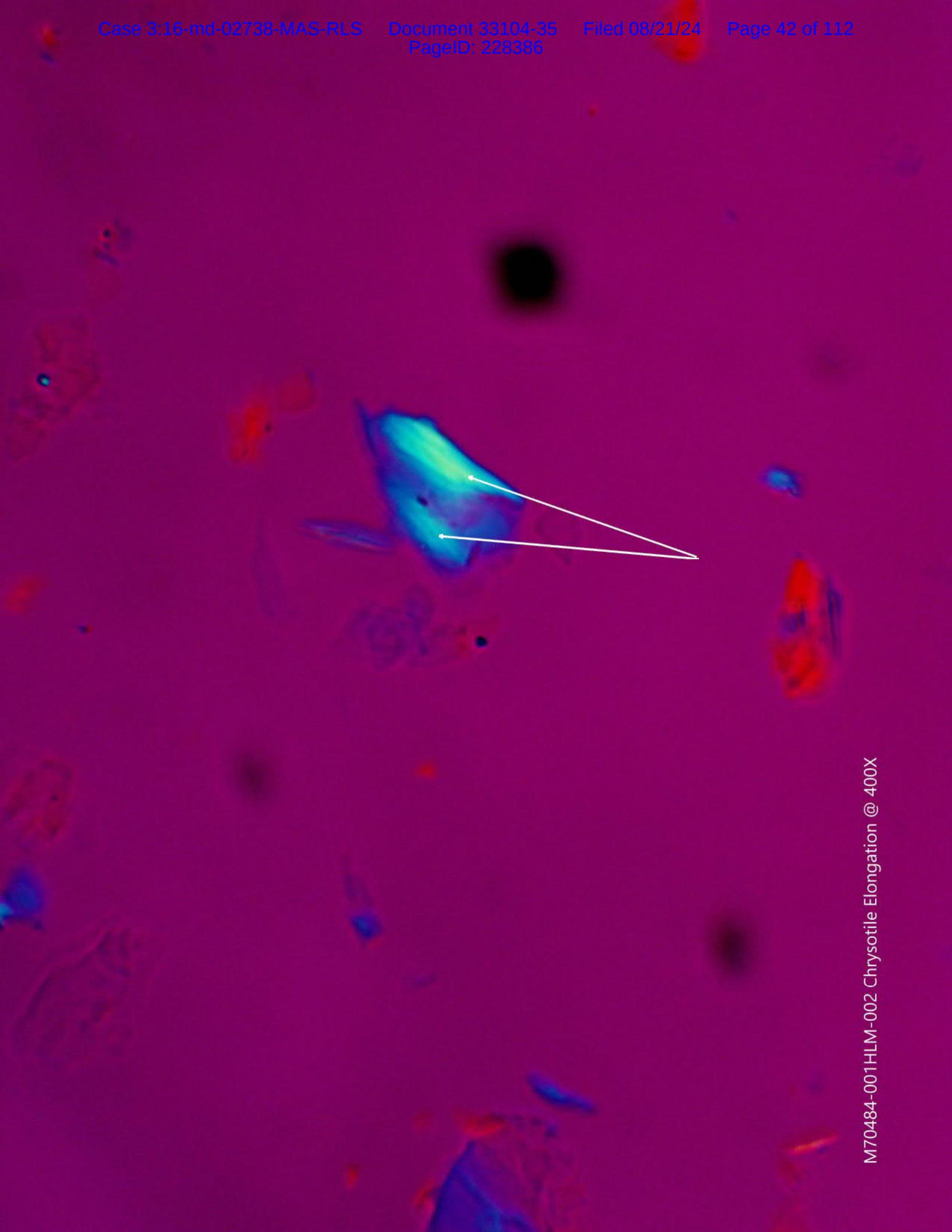


33.3 μm

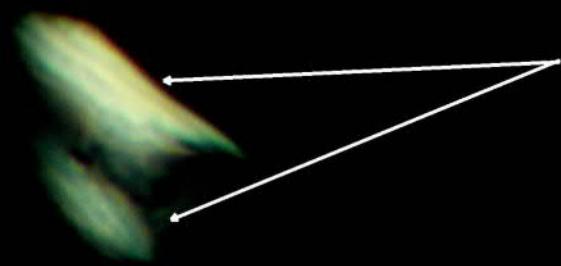
M70484-001HLM-002 Chrysotile Parallel Dispersion 1.550 R.I. @ 100X



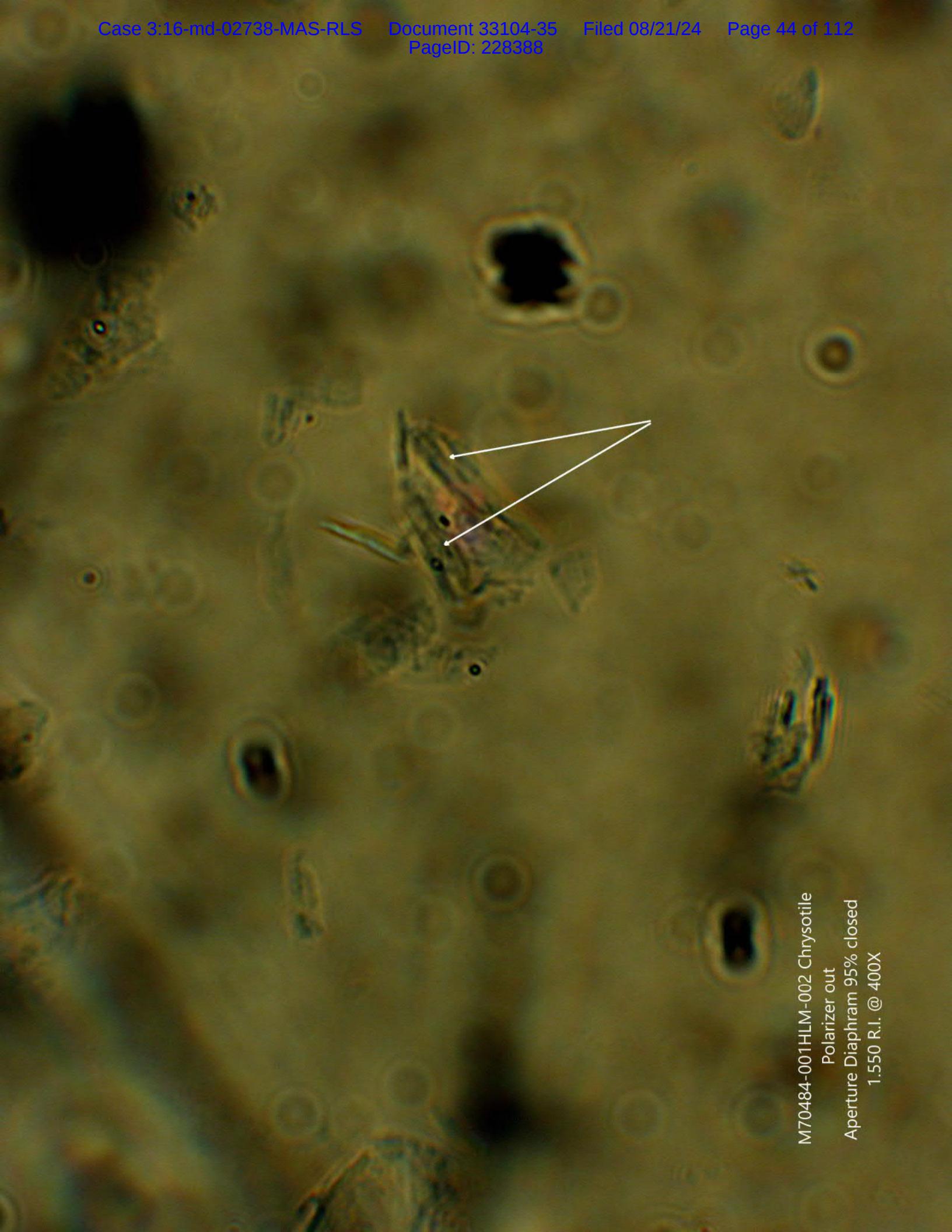
M70484-001HLM-002 Chrysotile
Perpendicular Dispersion



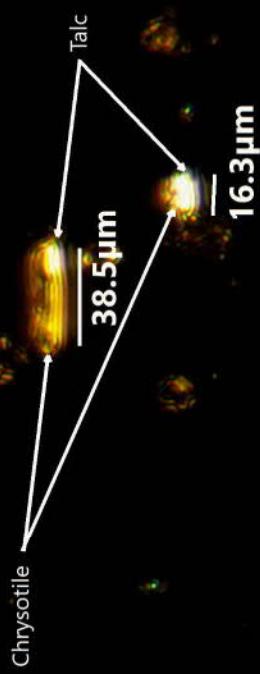
M70484-001HLM-002 Chrysotile Elongation @ 400X



M70484-001HLM-002 Chrysotile Crossed Polars



M70484-001HLM-002 Chrysotile
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X



M70484-001HLM-003 Chrysotile - Talc Parallel Dispersion 1.550 R.I. @ 100X

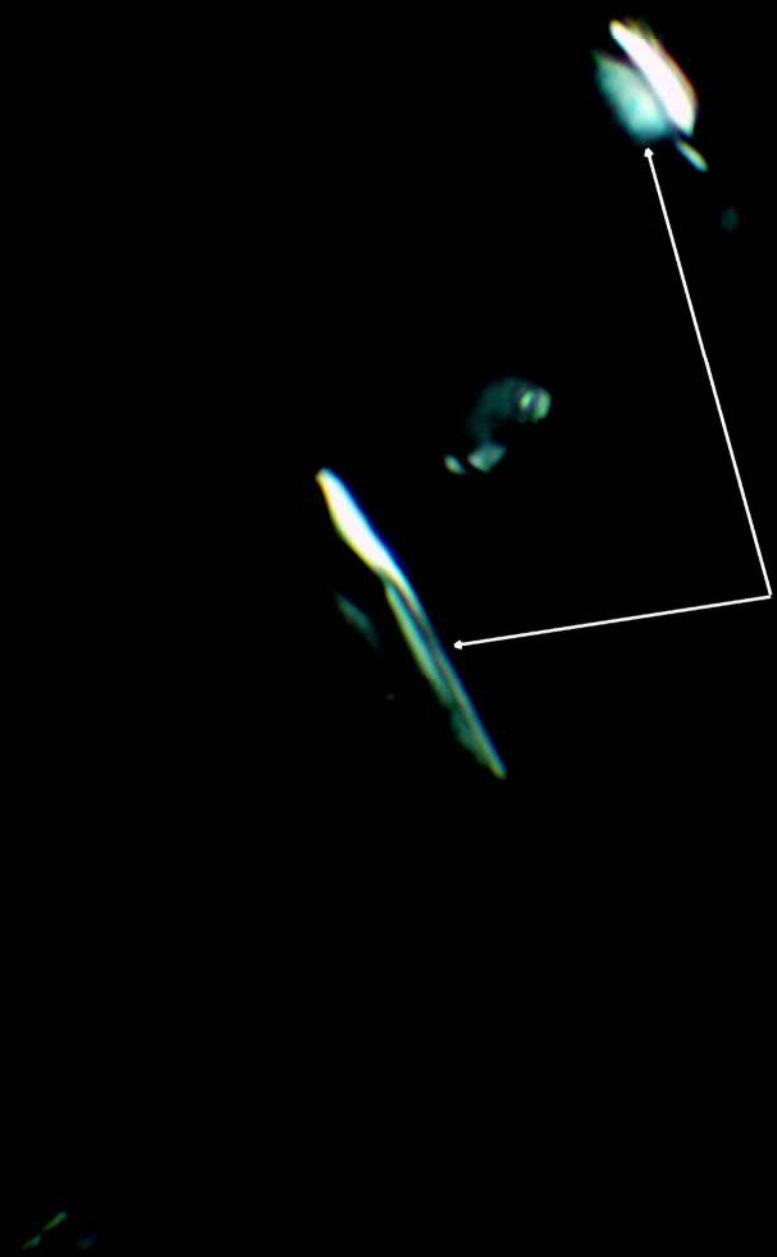
A polarized light micrograph showing numerous small, bright, elongated mineral fibers against a dark background. Two specific fibers are highlighted with white arrows and labeled: 'Talc' points to a short, thick fiber, and 'Chrysotile' points to a longer, thinner fiber.

Talc
Chrysotile

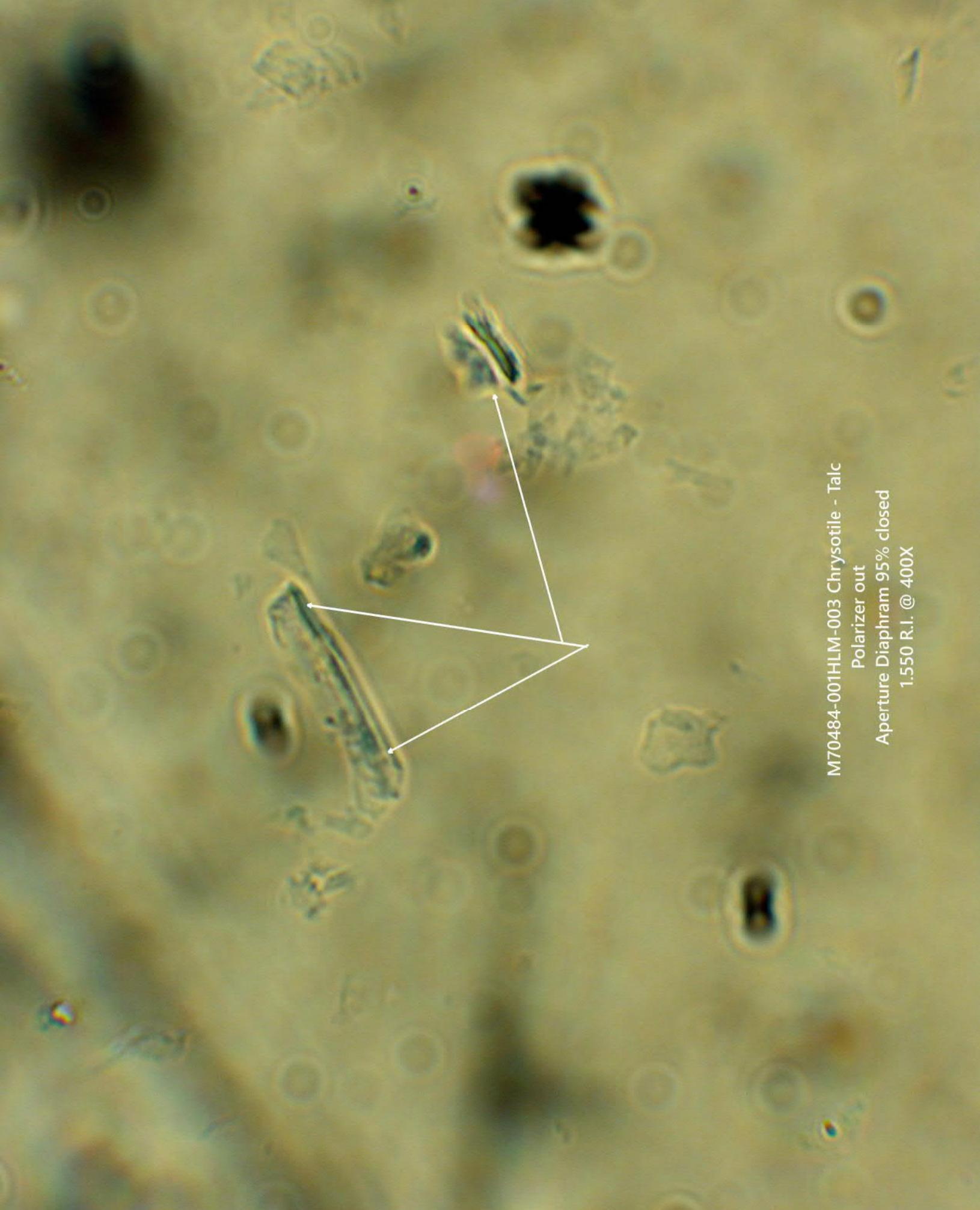
M70484-001HLM-003 Chrysotile-Talc
Perpendicular Dispersion



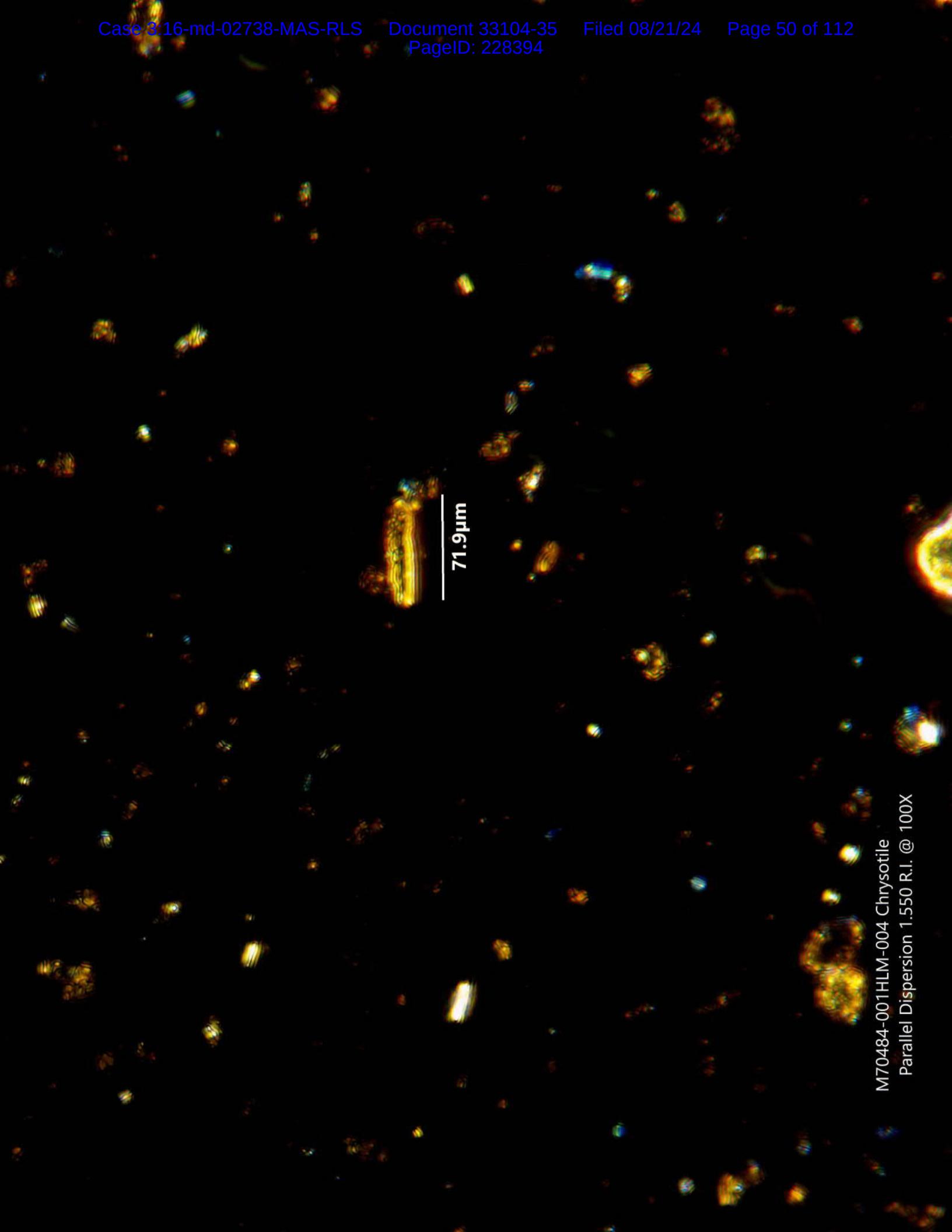
M70484-001HLM-003 Chrysotile - Talc Elongation @ 400X



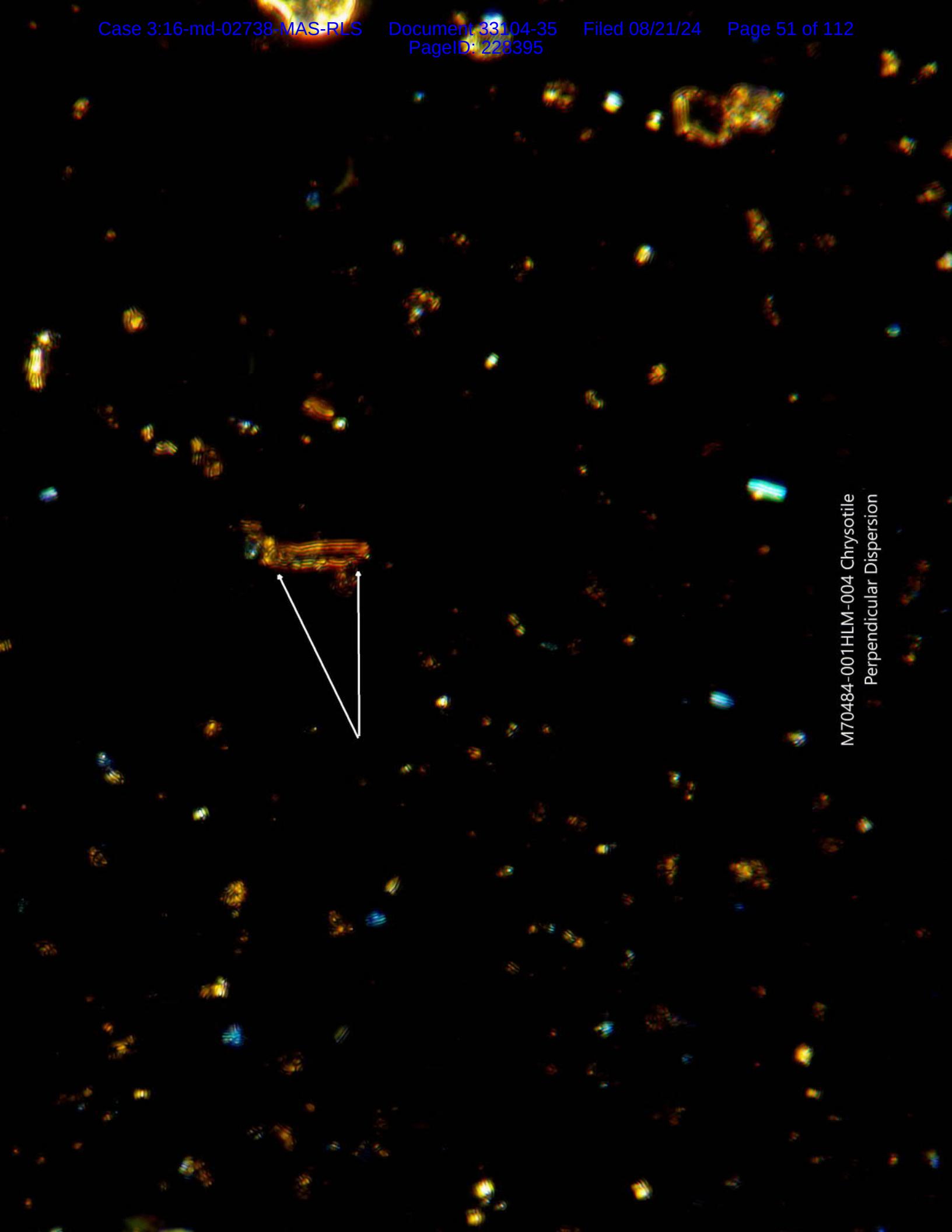
M70484-001HLM-003 Chrysotile - Talc Crossed Polars



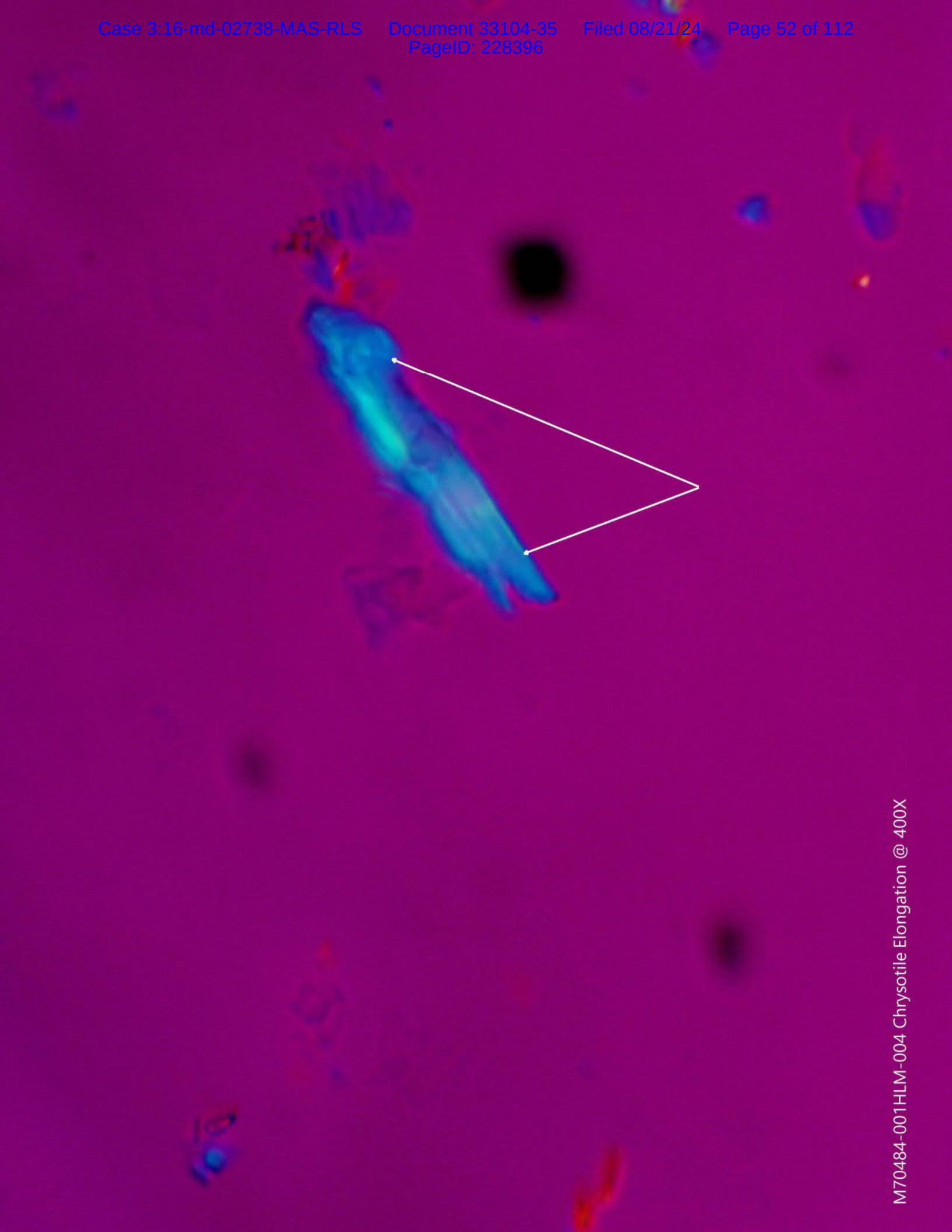
M70484-001HLM-003 Chrysotile - Talc
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X

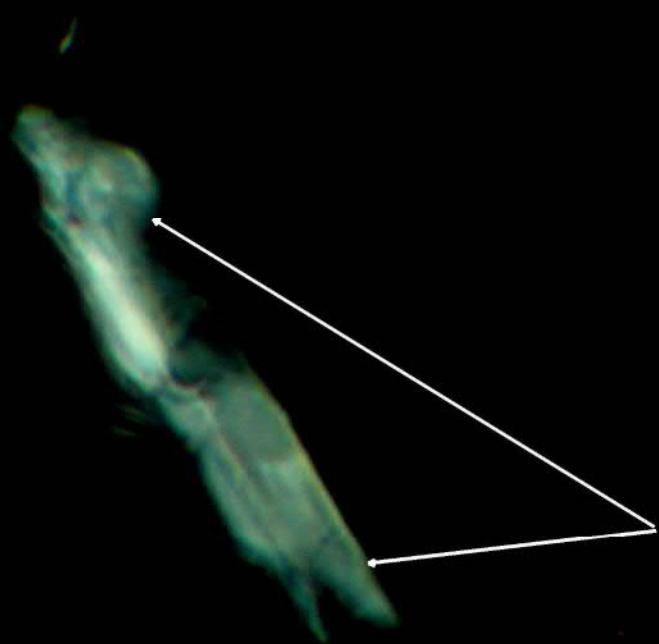


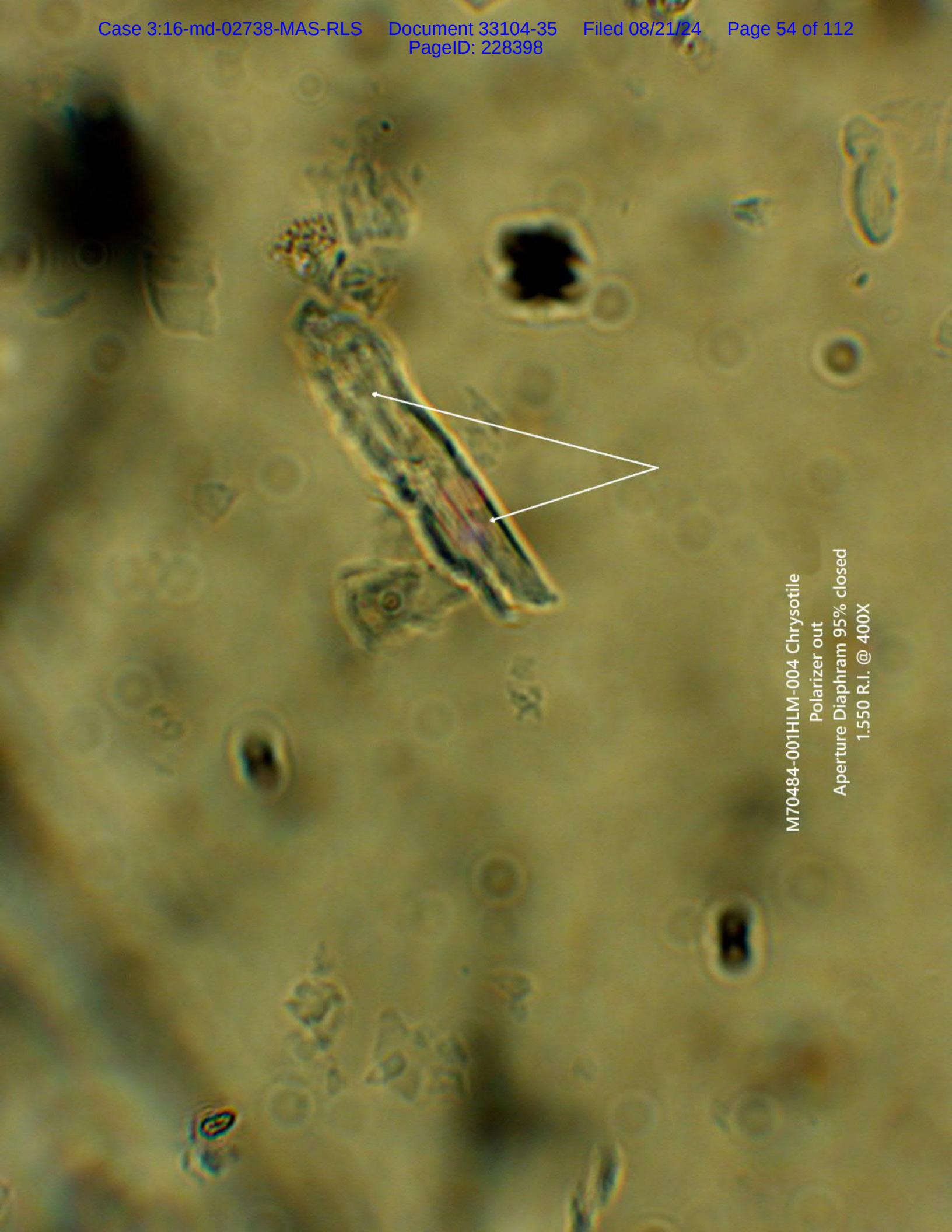
M70484-001HLM-004 Chrysotile
Parallel Dispersion 1.550 R.I. @ 100X



M70484-001HLM-004 Chrysotile
Perpendicular Dispersion





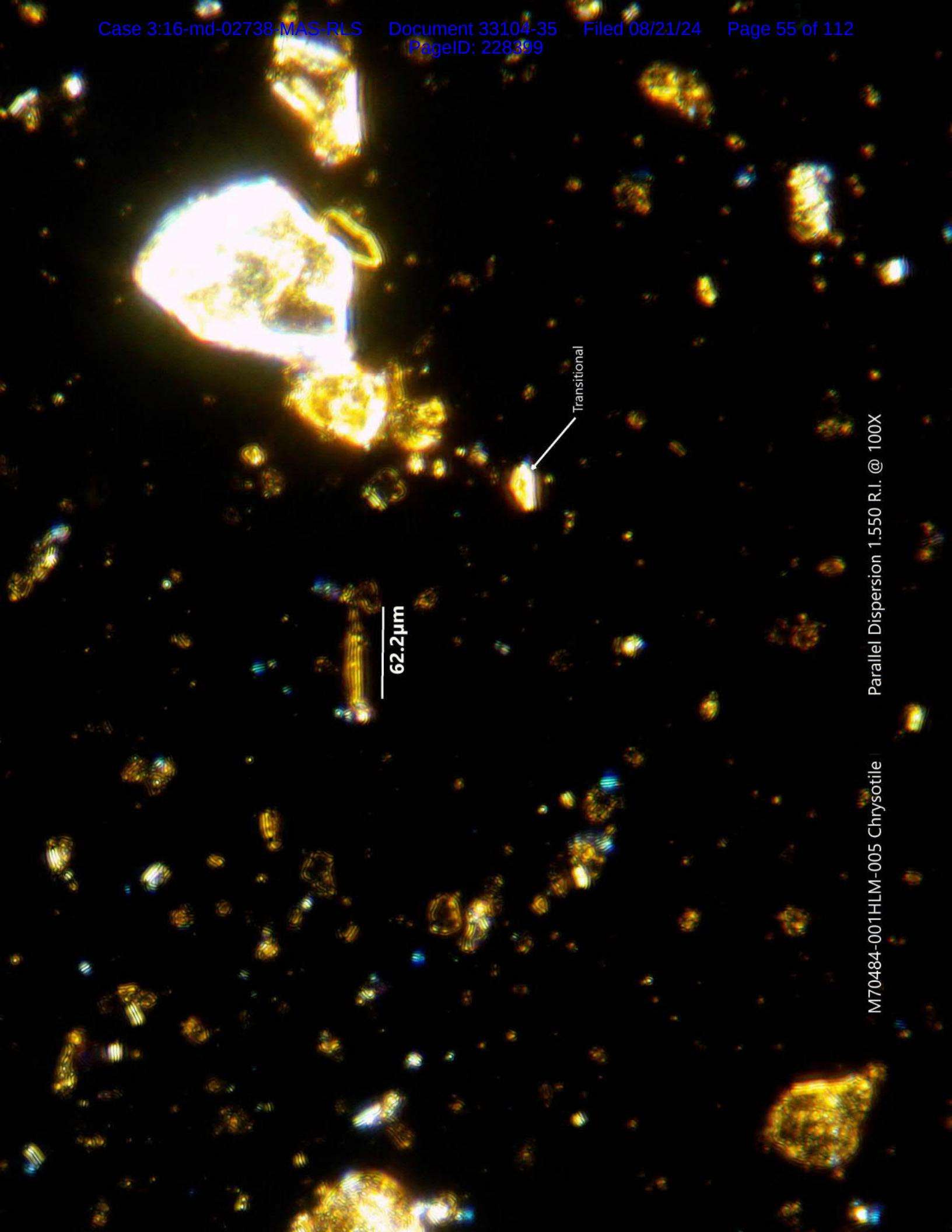


M70484-001HLM-004 Chrysotile

Polarizer out

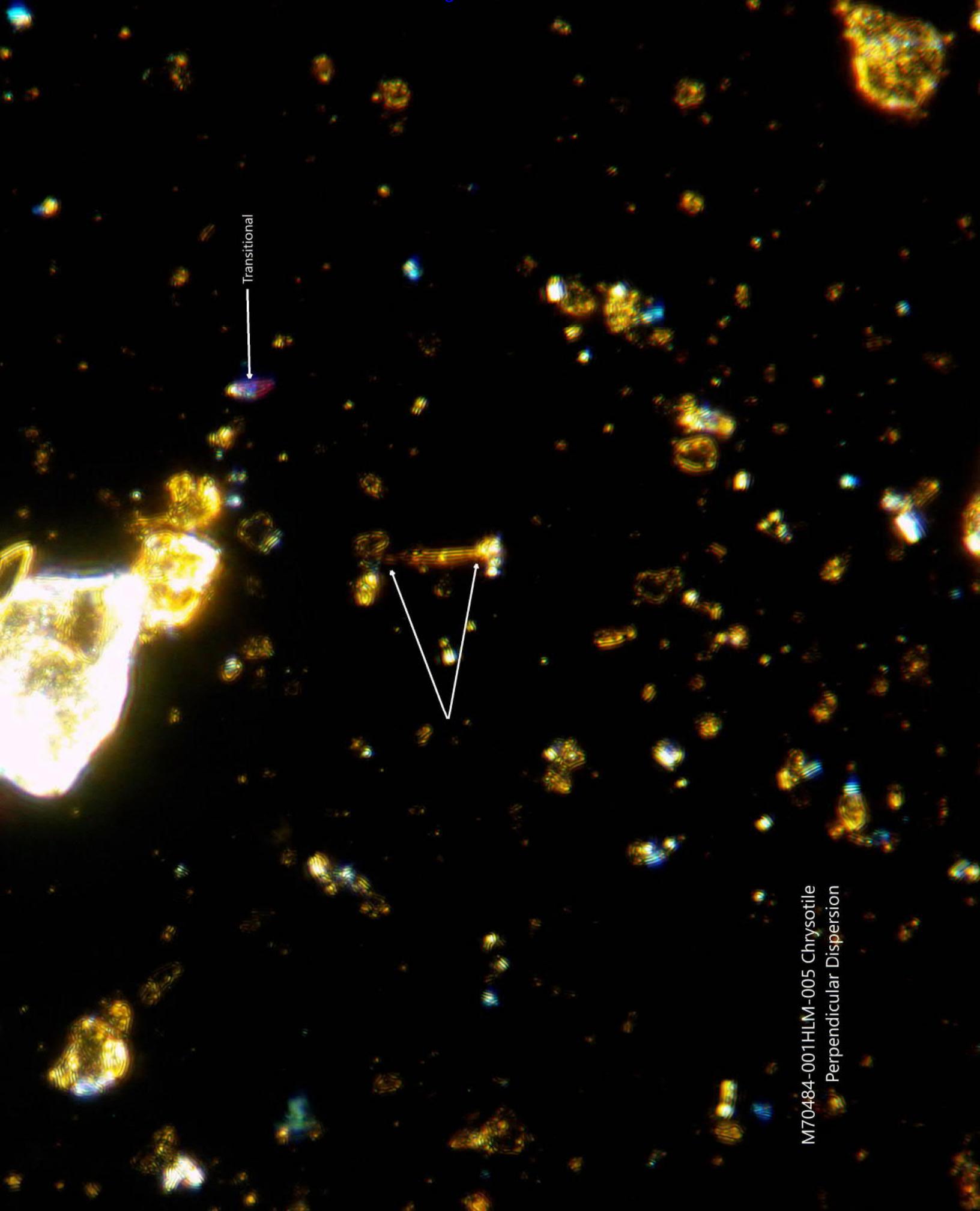
Aperture Diaphragm 95% closed

1.550 R.I. @ 400X

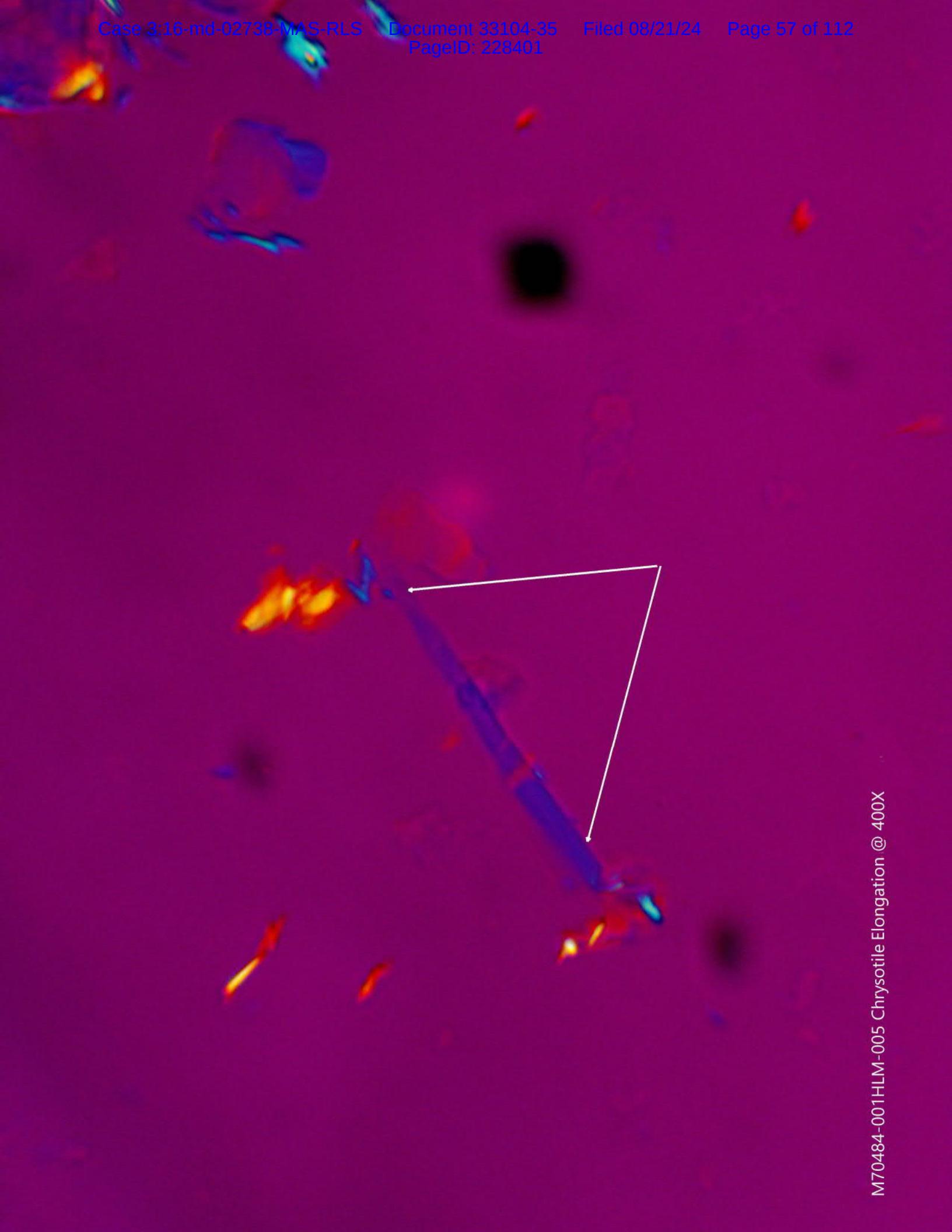


Parallel Dispersion 1.550 R.I. @ 100X

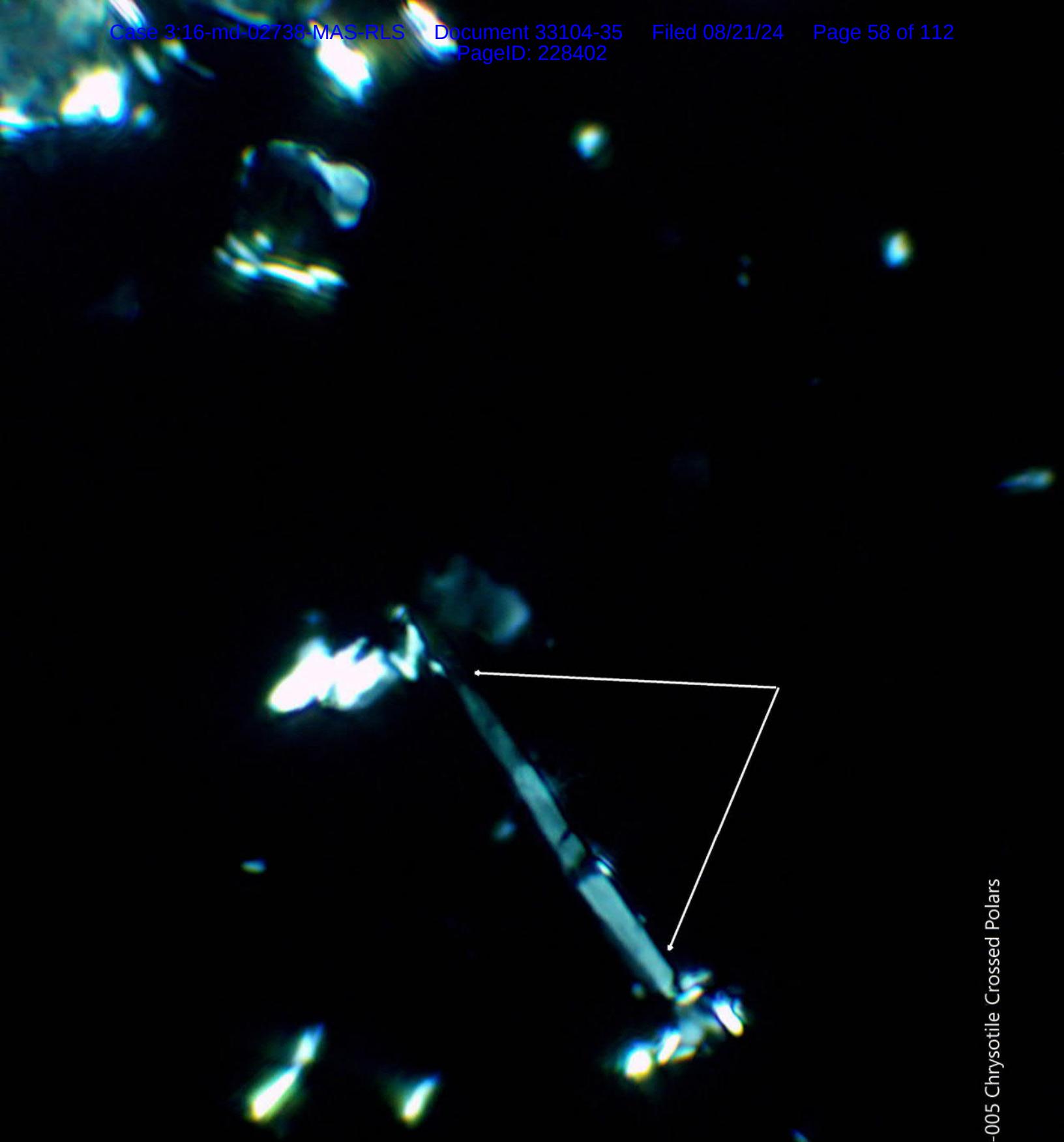
M70484-001HLM-005 Chrysotile



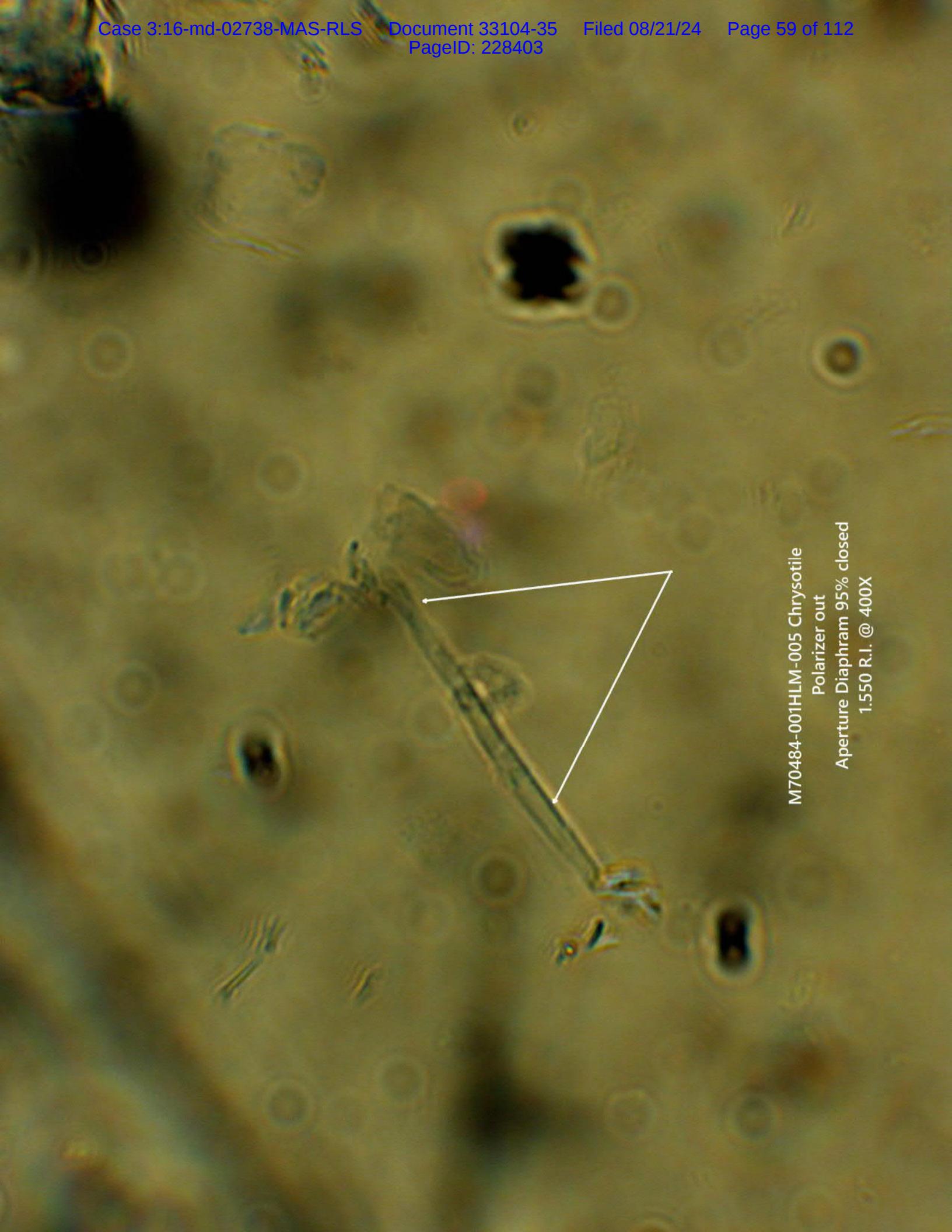
M70484-001HLM-005 Chrysotile
Perpendicular Dispersion



M70484-001HLM-005 Chrysotile Elongation @ 400X



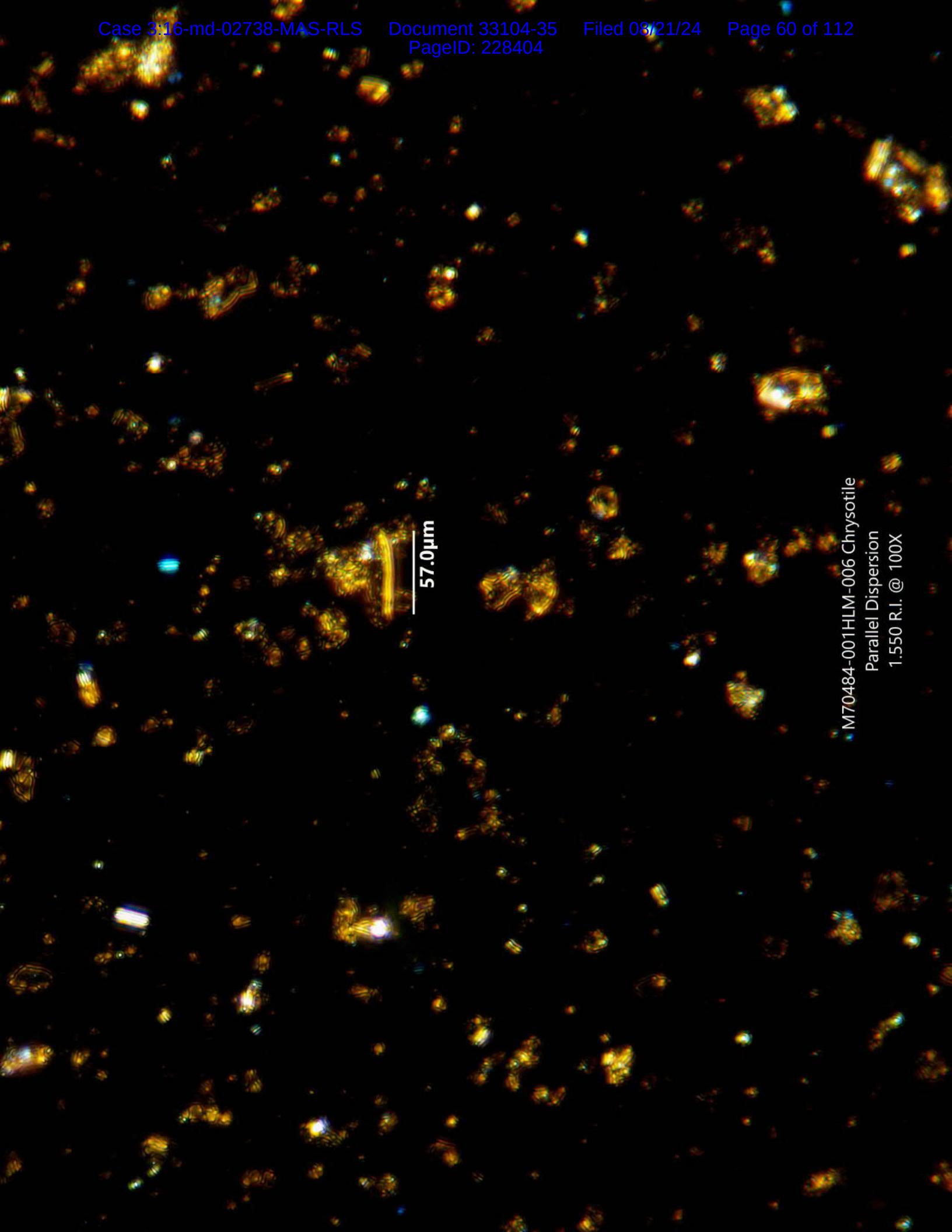
M70484-001HLM-005 Chrysotile Crossed Polars



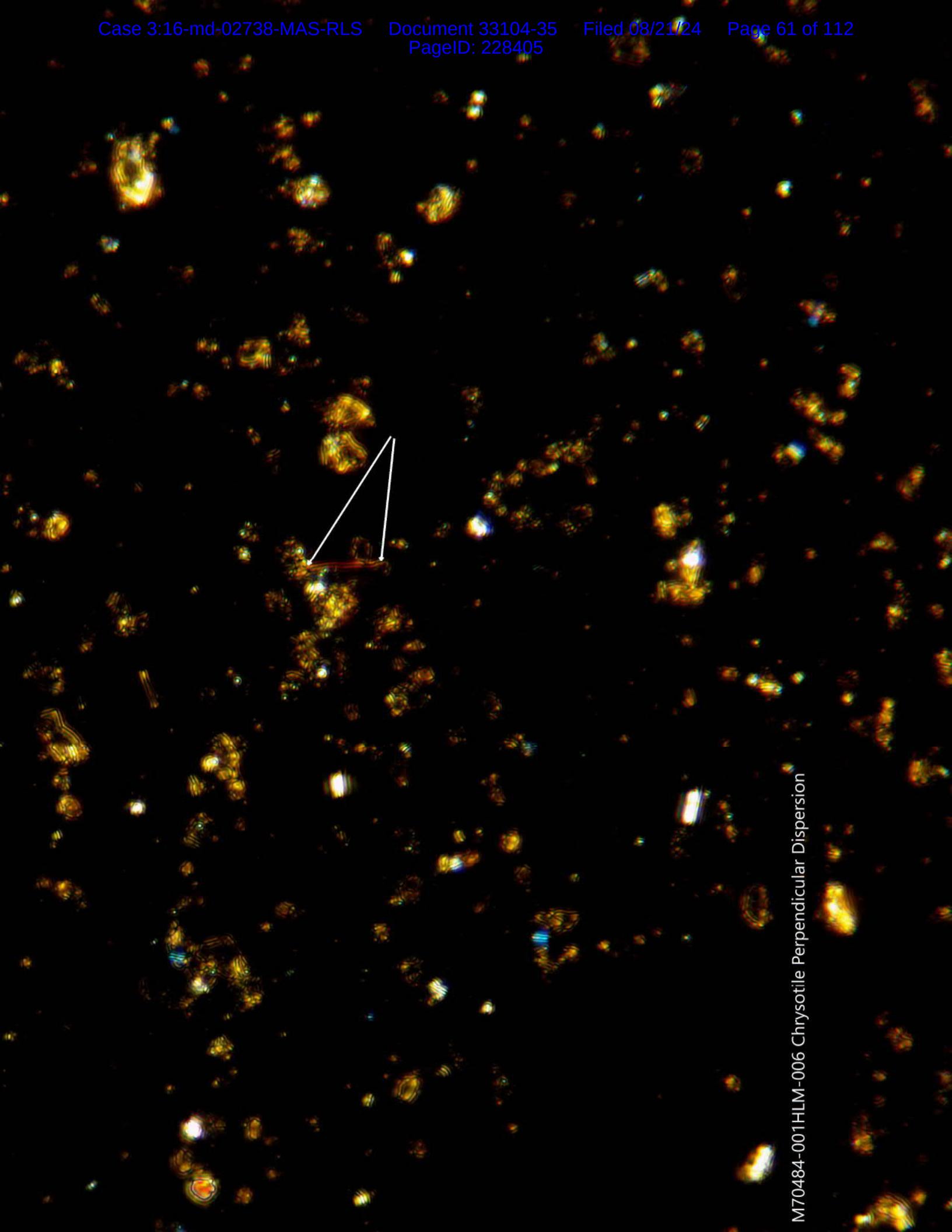
M70484-001HLM-005 Chrysotile

Polarizer out

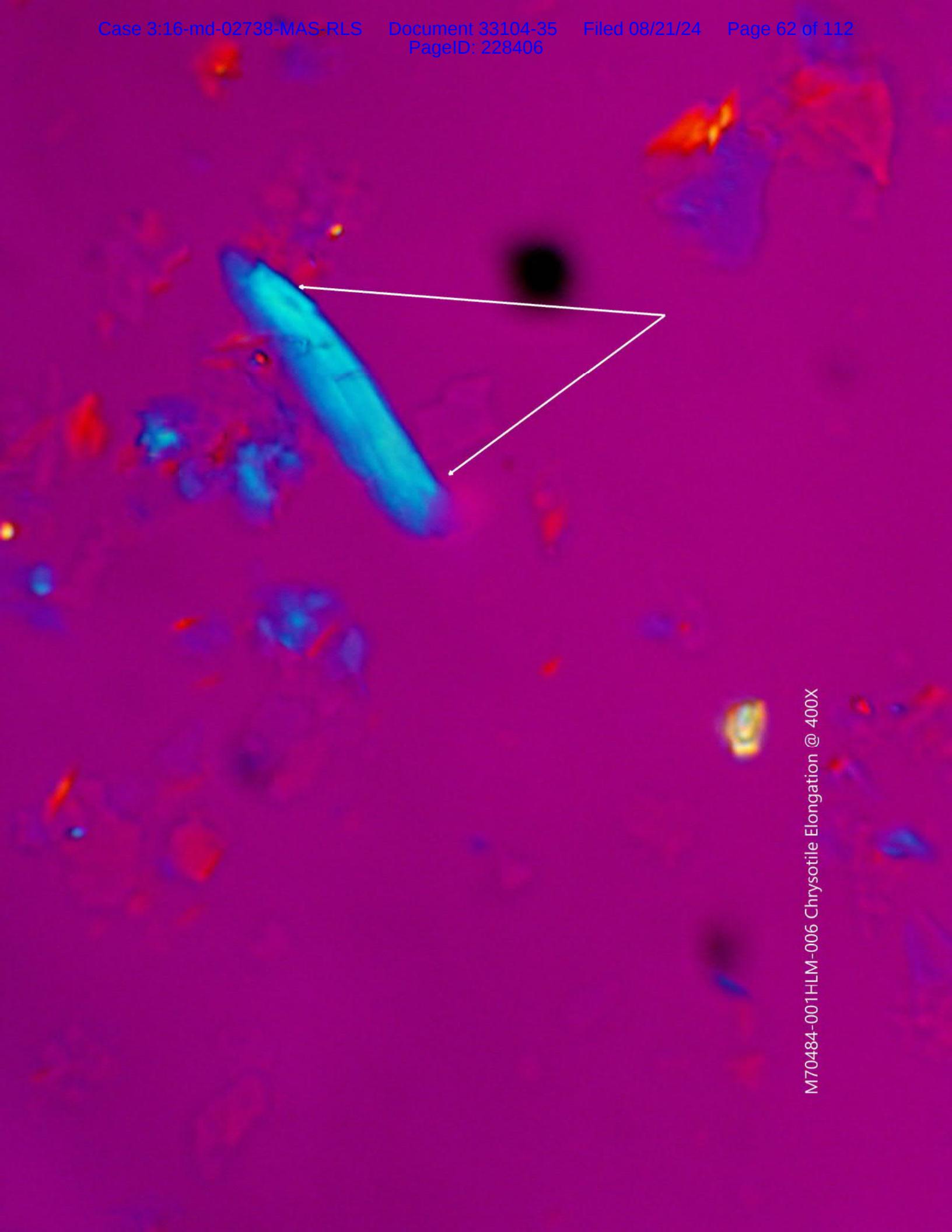
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X



M70484-001HLM-006 Chrysotile
Parallel Dispersion
1.550 R.I. @ 100X



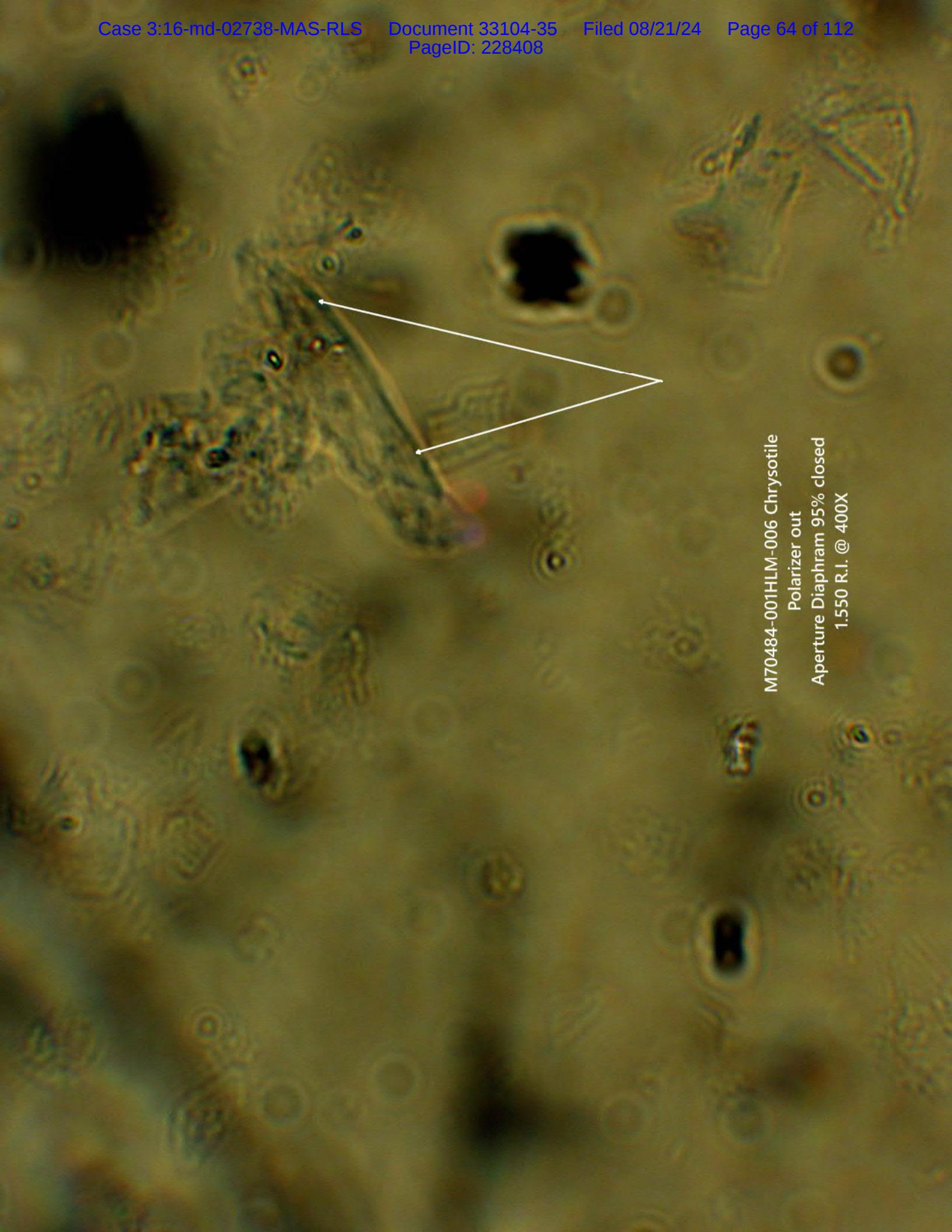
M70484-001HLM-006 Chrysotile Perpendicular Dispersion



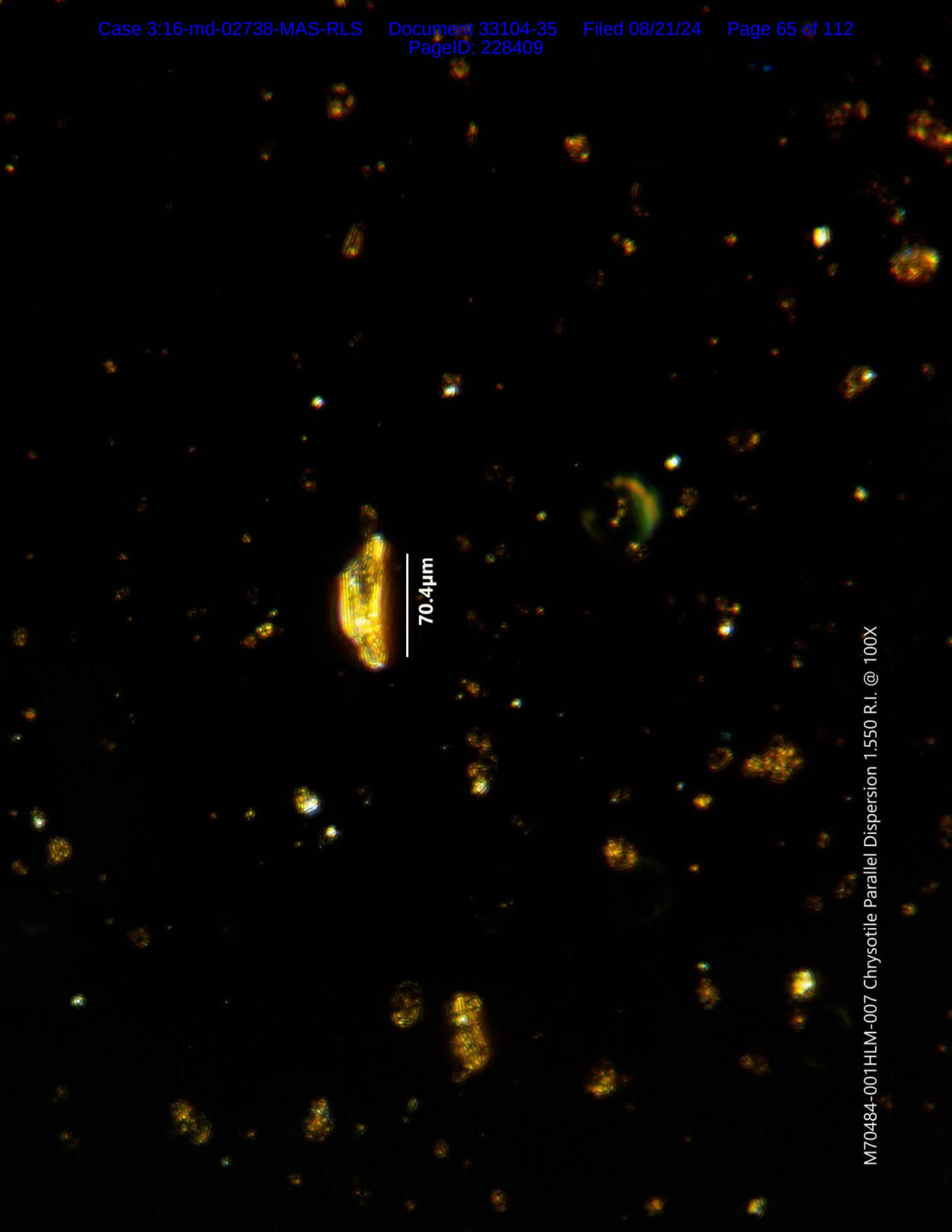
M70484-001HLM-006 Chrysotile Elongation @ 400X



M70484-001HLM-006 Chrysotile Crossed Polars



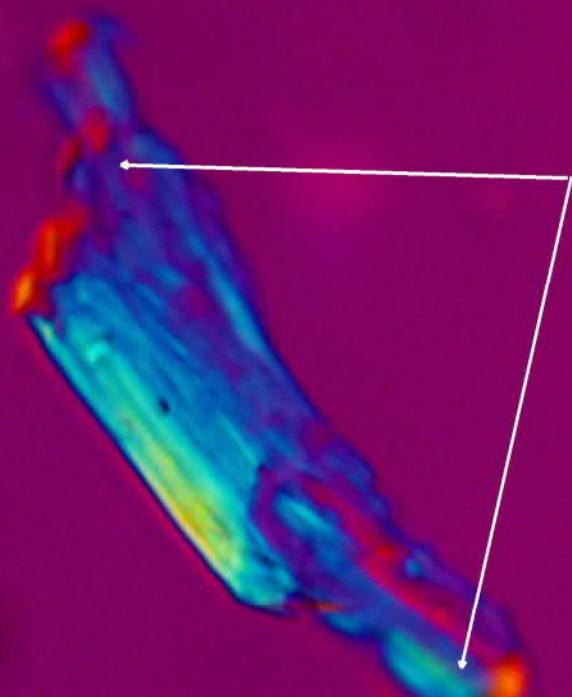
M70484-001HLM-006 Chrysotile
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X



M70484-001HLM-007 Chrysotile Parallel Dispersion 1.550 R.I. @ 100X



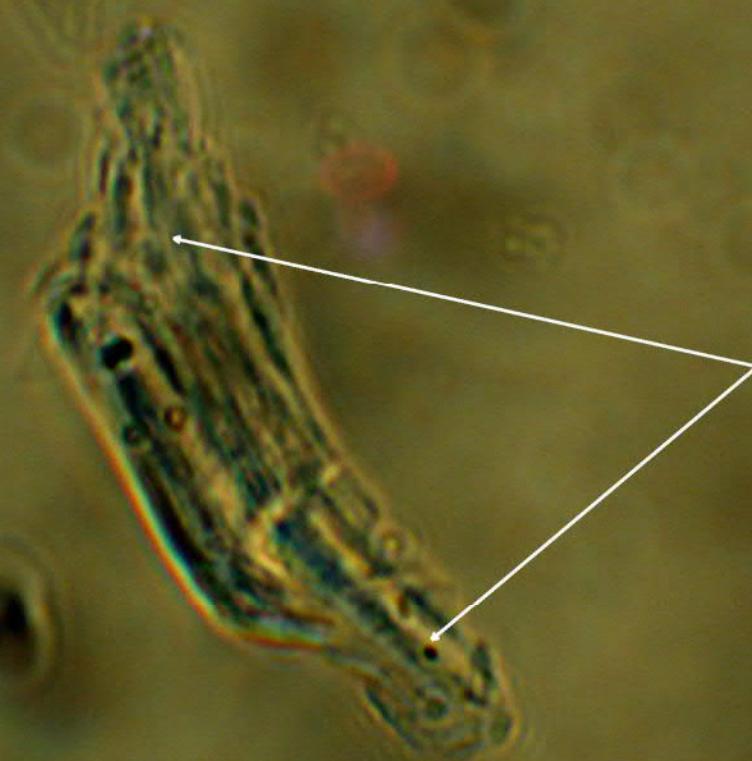
M70484-001HLM-007 Chrysotile Perpendicular Dispersion



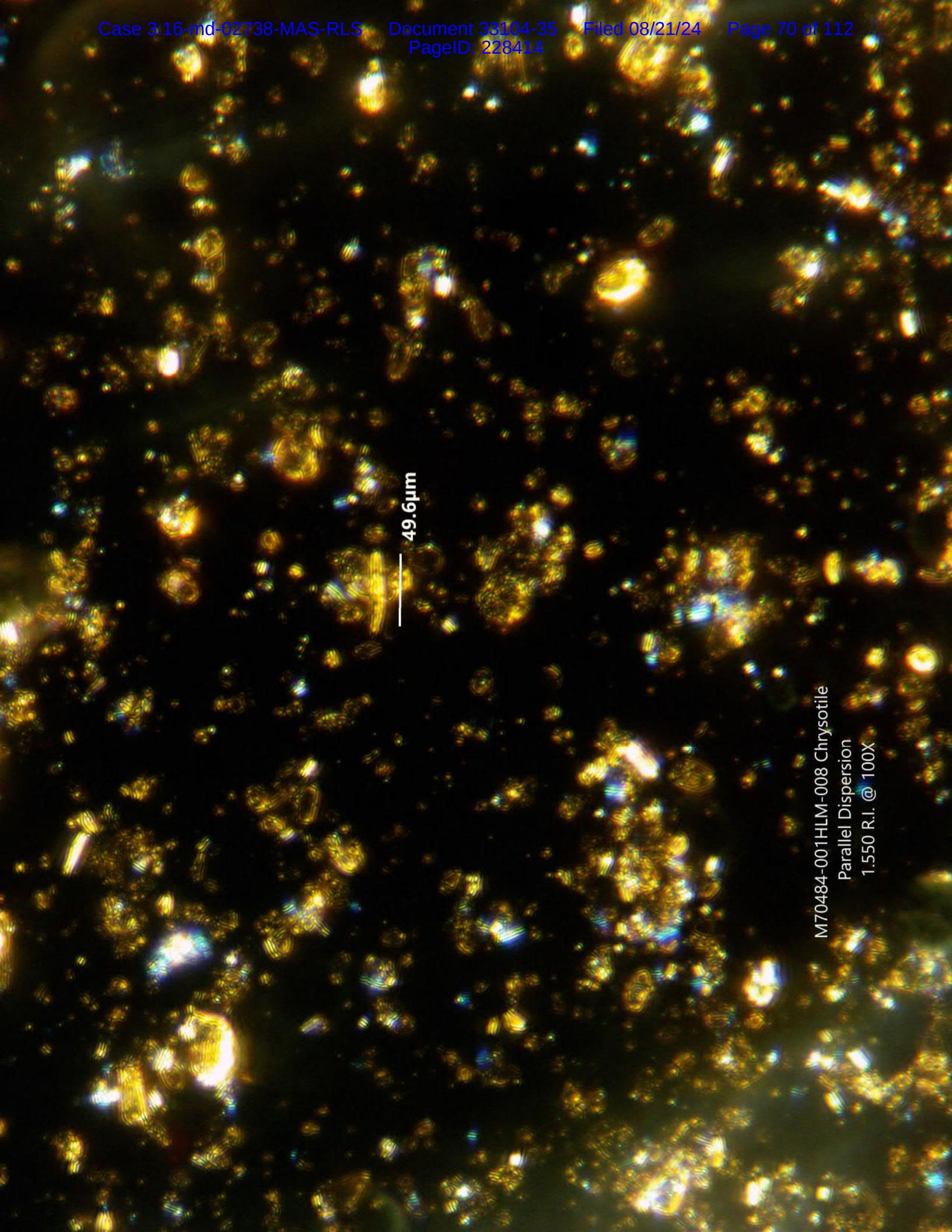
M70484-001HLM-007 Chrysotile Elongation @ 400X



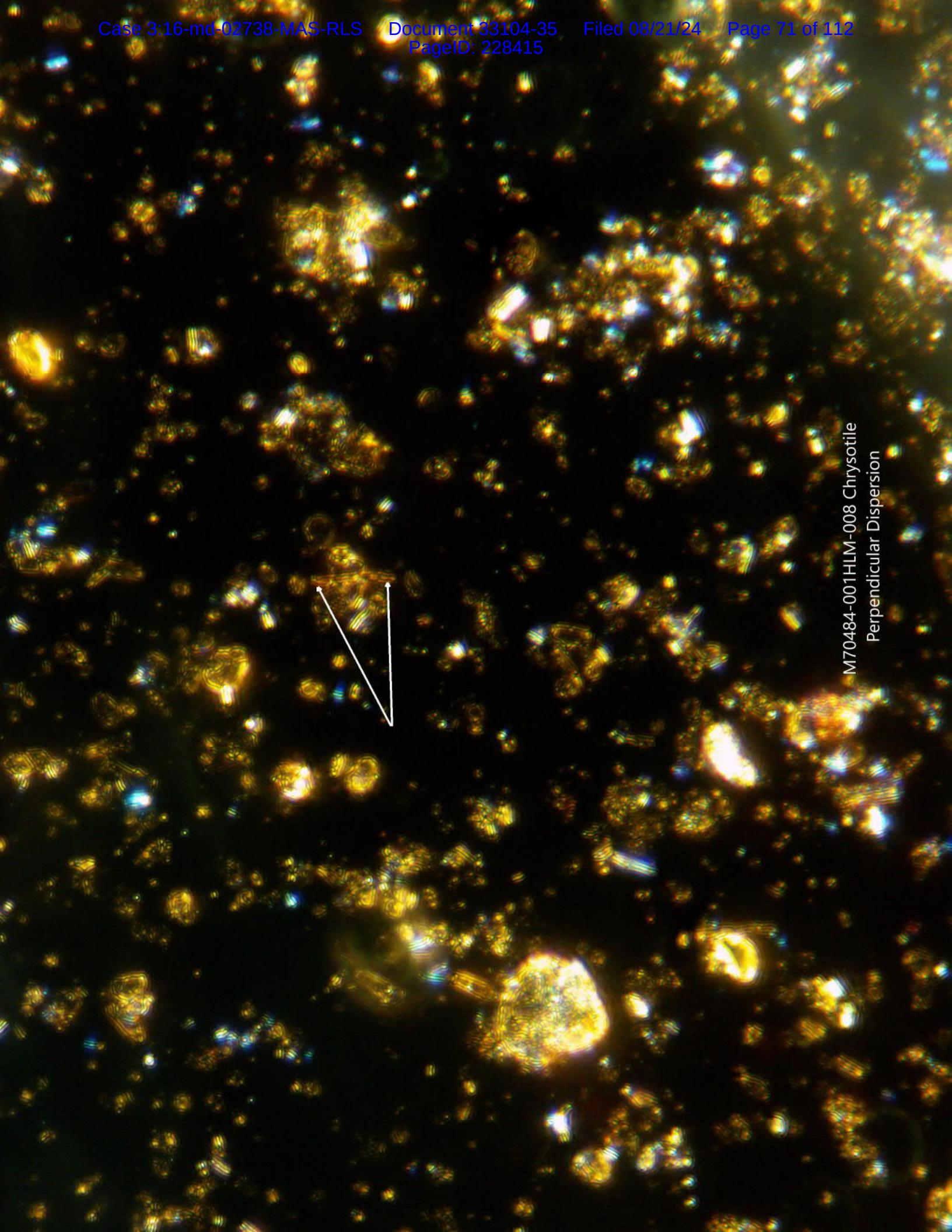
M70484-001HLM-007 Chrysotile Crossed Polars



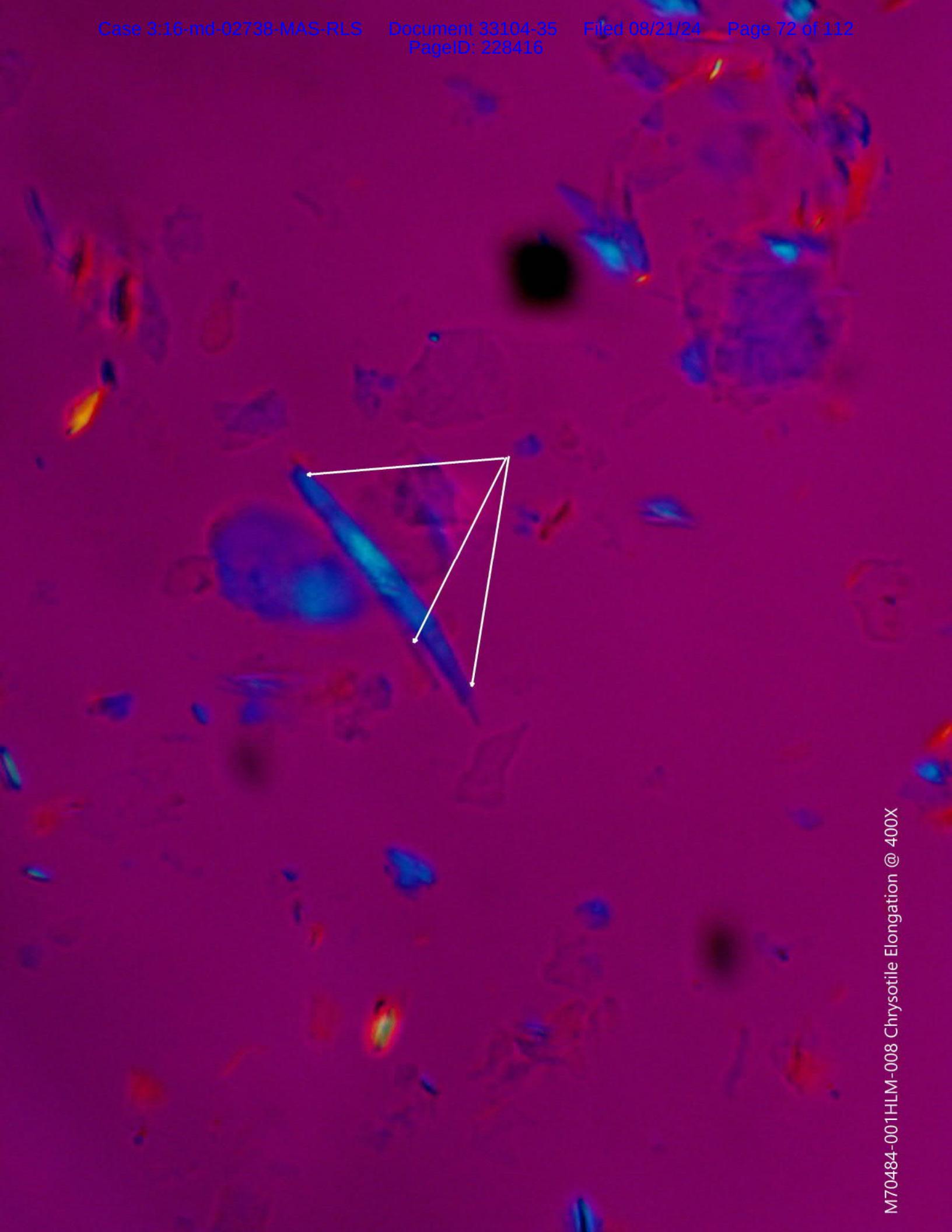
M70484-001HLM-007 Chrysotile
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X



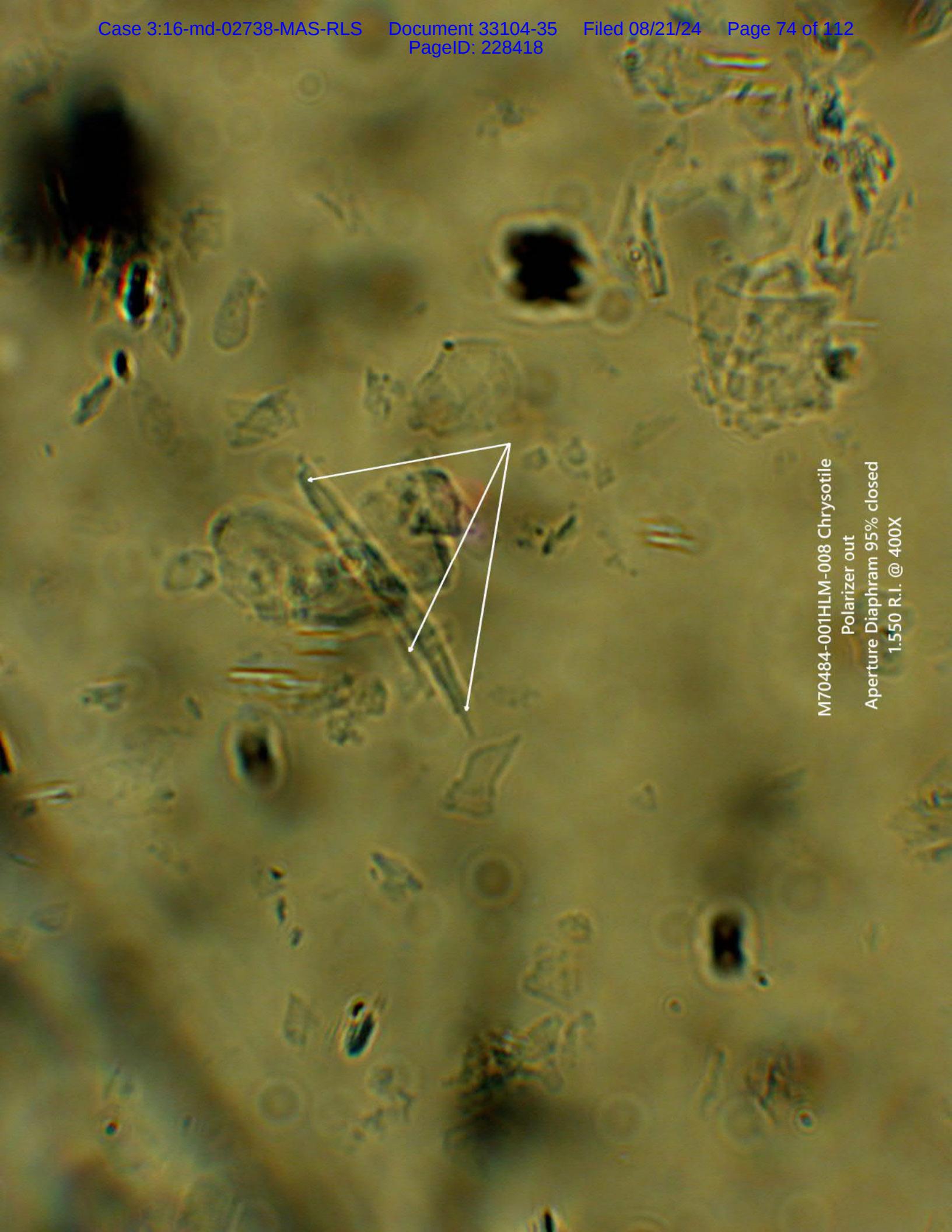
M70484-001HLM-008 Chrysotile
Parallel Dispersion
1.550 R.I. @ 100X



M70484-001HLM-008 Chrysotile
Perpendicular Dispersion



M70484-001HLM-008 Chrysotile Elongation @ 400X



M70484-001HLM-008 Chrysotile

Polarizer out

Aperture Diaphragm 95% closed
1.550 R.I. @ 400X

TEM Bulk Talc Structure Count Sheet

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-001	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/23/2019 - 7/24/2019	G. O. in microns =	105	105	11025
Initial Weight(g)	0.03180		105	105	11025
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		
			1.103		

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	E3-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
NSD	F1							
NSD	F2							
NSD	F3							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	H4							
NSD	H5							
NSD	H6							
NSD	H7							
NSD	H8							
NSD	H9							
NSD	H10							
NSD	I4							
NSD	I5							
NSD	I6							
NSD	I7							
NSD	I8							

TEM Bulk Talc Structure Count Sheet

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	E4-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	F1							
NSD	F2							
NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	G1							
NSD	G2							
NSD	G3							
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							
NSD	I1							
NSD	I2							
NSD	I3							
NSD	I4							
NSD	I5							
NSD	I6							
NSD	I7							
NSD	I8							
NSD	I9							
NSD	I10							

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-001		Grid Box #	8668	No. of Grids Counted
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/23/2019 - 7/24/2019		105	105	11025
Initial Weight(g)	0.03180		G. O. in microns =	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		
1.103					

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
--------	--------------	-----------	------------------	--------	-------	-------	------	-----

Org. Sample Wt.	Sample Wt.
	Post HL Separation
0.03180	0.03180 g

Percent of
Orig. Post
Separation 100 (%)

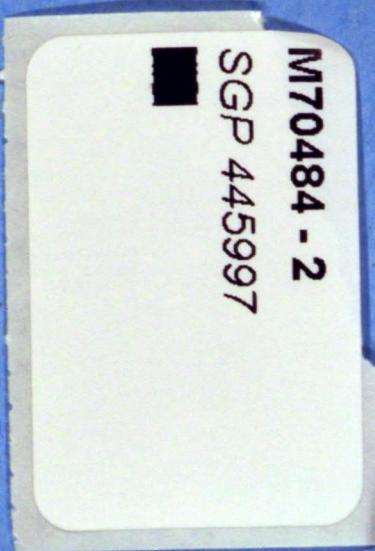
Wt. Of Sample Analyzed	0.00017434	g	Detection Limit	5.74E+03 Str./g
Filter size	201.1	mm ²		
Number of Structures Counted	0	Str.		
Structures per Gram of Sample	<5,740	Str./g		

Analytical
Sensitivity

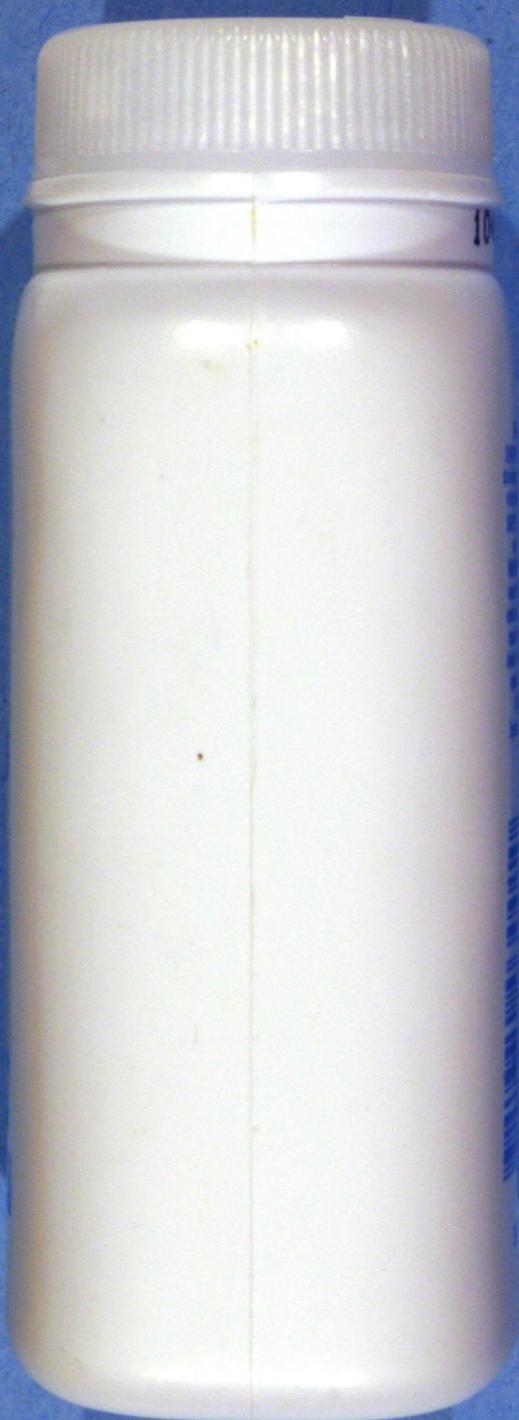
TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-001	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G.O. Area
Date of Analysis	7/23/2019 - 7/24/2019	G. O. in microns =	105	105	105
Initial Weight(g)	0.03180		105	105	105
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		1.103

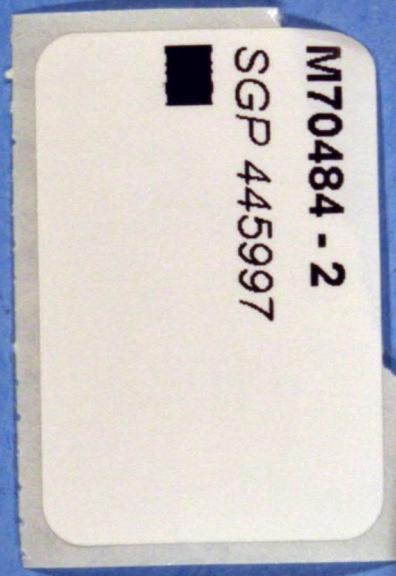
Str. #	Grid Opening	Str./Asb. Type	Length	Width	Ratio	SAED	EDS
NSD	E3-A1					No fibrous talc observed	

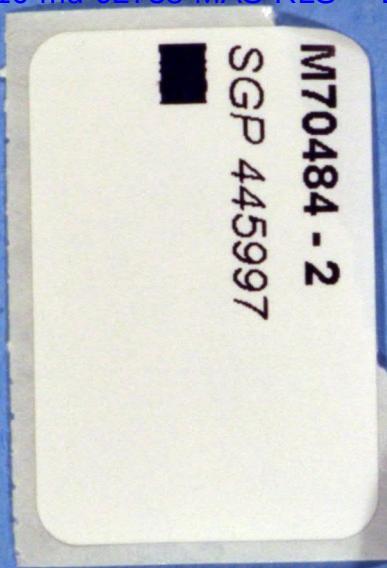
Section 4

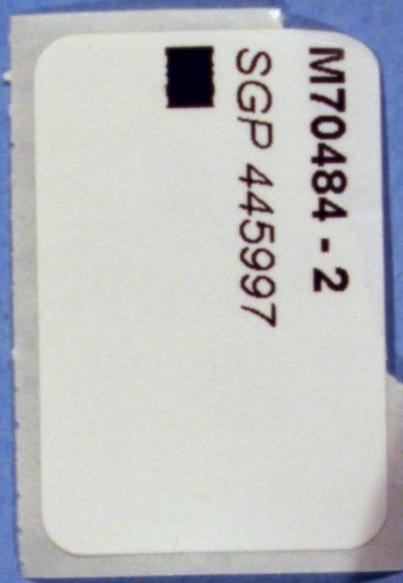


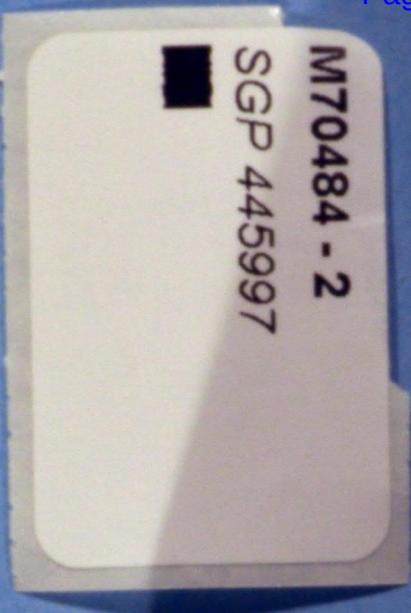
M70484 - 2
SGP 445997











**MAS, LLC
PLM ANALYSIS**

Proj#-Spl#	M70484- 002BL	Analyst	Paul Hess	Date	6/19/2019
ClientName	Simon Greenstone Panatier Bartlett	ClientSpl	SGP 445997		
Location					
Type_Mat	Johnson & Johnson Baby Powder 1.5oz				
Gross	Off-white debris on slide			% of Sample	100
Visual					

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology	<input type="text"/>	<input type="text"/>	<input type="text"/>
Pleochroism	<input type="text"/>	<input type="text"/>	<input type="text"/>
Refract Index	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sign^	<input type="text"/>	<input type="text"/>	<input type="text"/>
Extinction	<input type="text"/>	<input type="text"/>	<input type="text"/>
Birefringence	<input type="text"/>	<input type="text"/>	<input type="text"/>
Melt	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fiber Name	<input type="text"/>	<input type="text"/>	<input type="text"/>

ASBESTOS MINERALS

EST. VOL. %

NO ASBESTOS OBSERVED

Chrysotile.....	<input type="text"/>
Amosite.....	<input type="text"/>
Crocidolite.....	<input type="text"/>
Tremolite/Actinolite.....	<input type="text"/>
Anthophyllite.....	<input type="text"/>

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55	***
<input type="text"/>	<input type="text"/>

NON FIBROUS COMPONENTS

Opaques	<input type="text"/> X
Talc	<input type="text"/> X
Mineral grains	<input type="text"/> X
<input type="text"/>	<input type="text"/>

Binder Description

Comments X = Materials detected. *** Moderate amount of Fibrous Talc observed.

The method detection limit is 1% unless otherwise stated.

**MAS, LLC
PLM ANALYSIS**

Proj#-Spl# M70484- 002ISO **Analyst** Paul Hess **Date** 6/17/2019
ClientName Simon Greenstone Panatier Bartlett **ClientSpl** SGP 445997
Location
Type_Mat Johnson & Johnson Baby Powder 1.5oz
Gross Off-white powder **% of Sample** 100
Visual

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology		
Pleochroism		
Refract Index		
Sign^		
Extinction		
Birefringence		
Melt		
Fiber Name		

ASBESTOS MINERALS

EST. VOL. %
NO ASBESTOS OBSERVED

Chrysotile.....
Amosite.....
Crocidolite.....
Tremolite/Actinolite.....
Anthophyllite.....

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55 ***

NON FIBROUS COMPONENTS

Opaques	X
Talc	X
Mineral grains	X
_____	_____

Binder Description _____

Comments X = Materials detected. *** Abundant Fibrous Talc observed.

**MAS, LLC
PLM ANALYSIS**

Proj#-Spl# M70484- 002HLM **Analyst** Paul Hess **Date** 2/22/2020

ClientName Simon Greenstone Panatier Bartlett **ClientSpl** SGP 445997

Location _____

Type_Mat Johnson & Johnson Baby Powder 1.5oz

Gross White debris on filter **% of Sample** 100

Visual _____

OPTICAL DATA FOR ASBESTOS IDENTIFICATION

Morphology	wavy		
Pleochroism	none		
Refract Index	1.561/1.552		
Sign^	positive		
Extinction	parallel		
Birefringence	low		
Melt	no		
Fiber Name	Chrysotile		

ASBESTOS MINERALS**EST. VOL. %**

Chrysotile.....	0.001 to 0.01
Amosite.....	
Crocidolite.....	
Tremolite/Actinolite.....	
Anthophyllite.....	

OTHER FIBROUS COMPONENTS

Talc -B/Y DS in 1.55	***
_____	_____
_____	_____
_____	_____
_____	_____

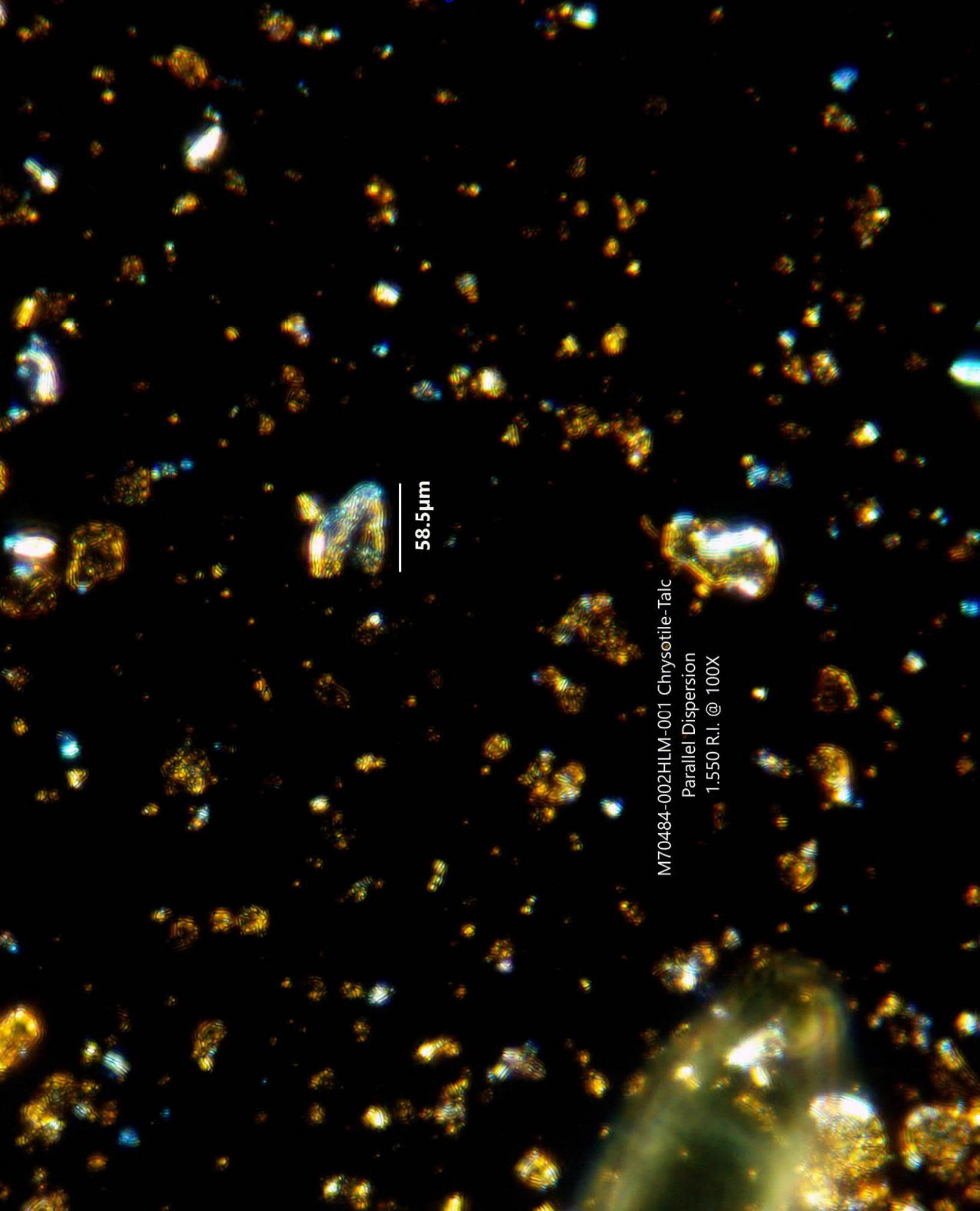
NON FIBROUS COMPONENTS

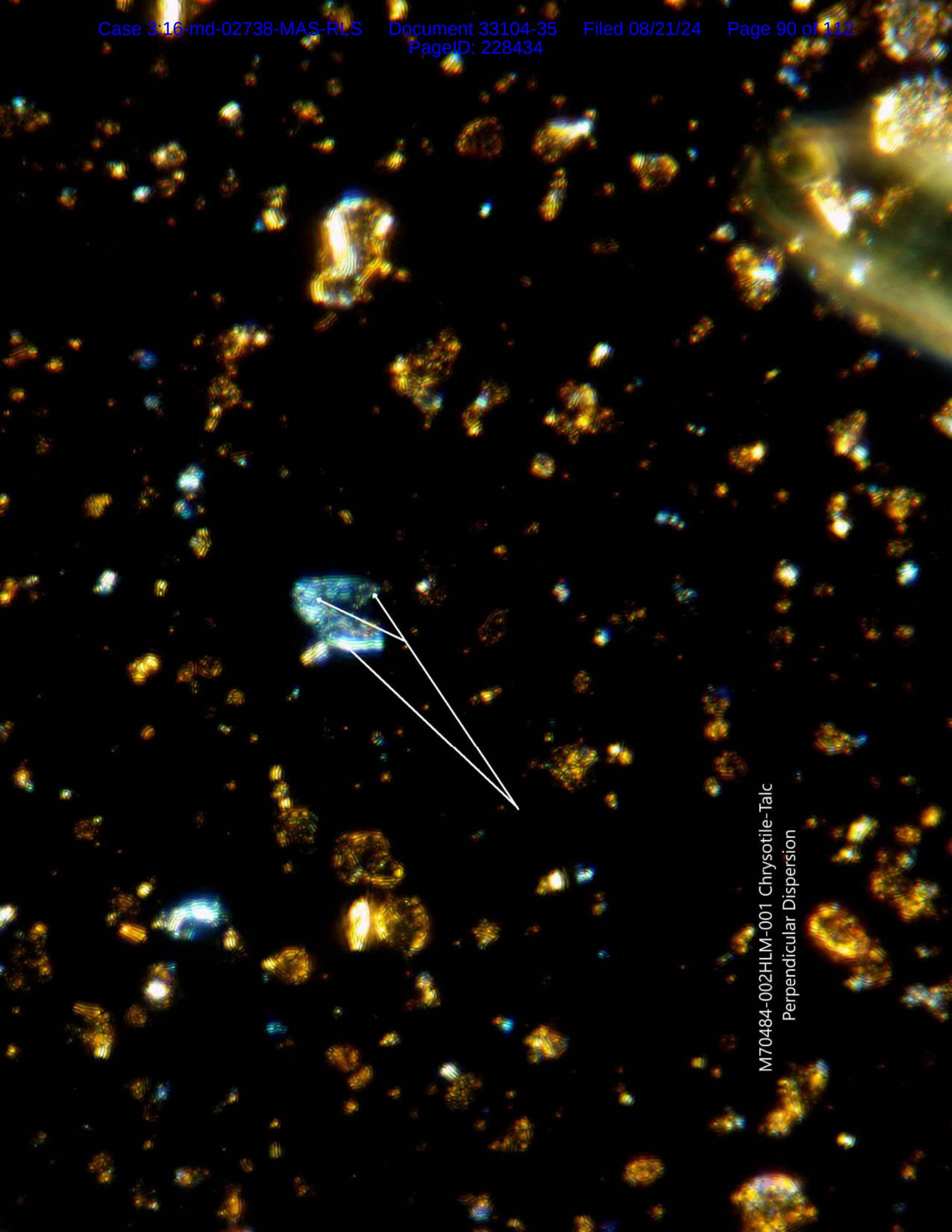
Opaques	X
Talc	X
Mineral grains	X
_____	_____

Binder Description _____

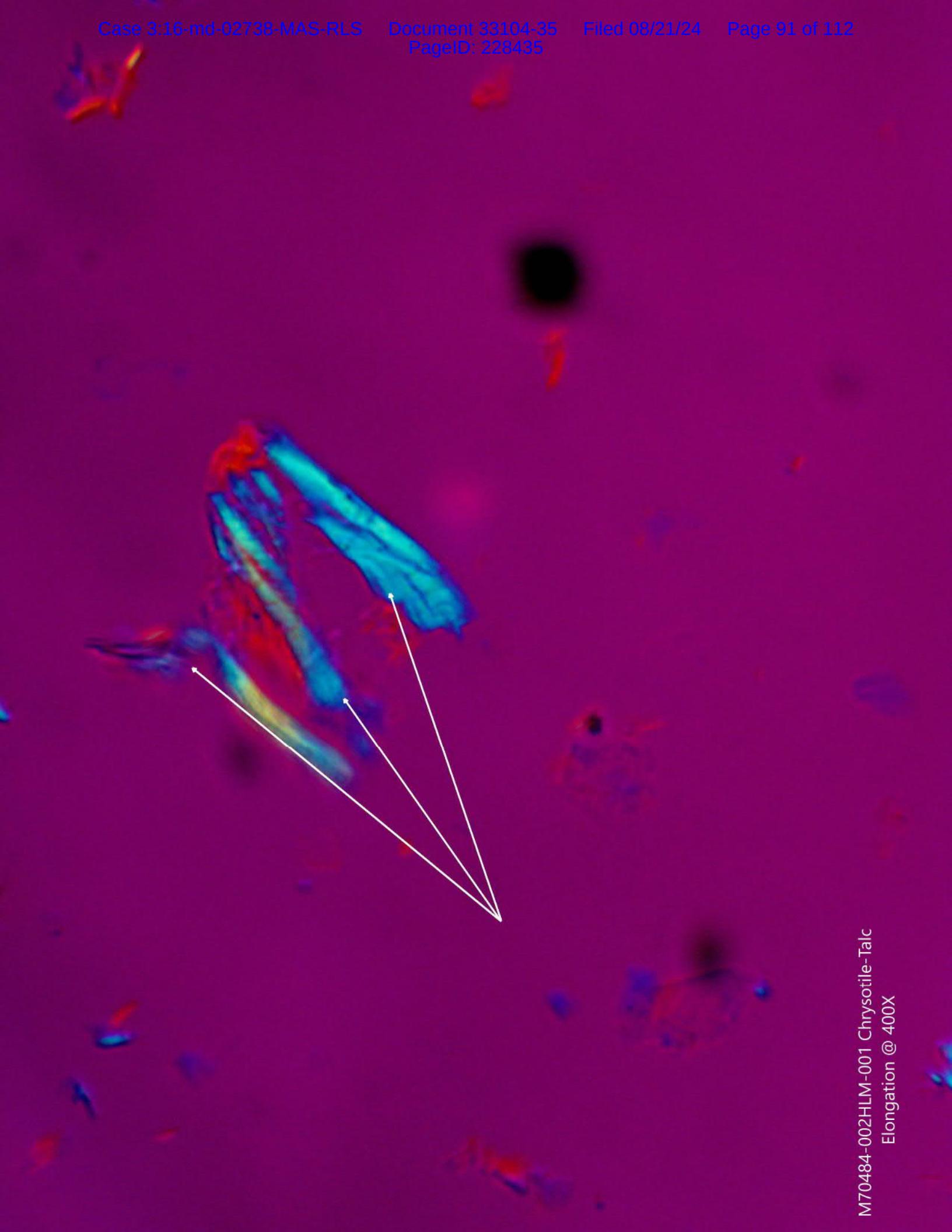
Comments Chrysotile asbestos observed. X = Materials detected. *** Moderate amount of Fibrous Talc observed.

The method detection limit is 1% unless otherwise stated.

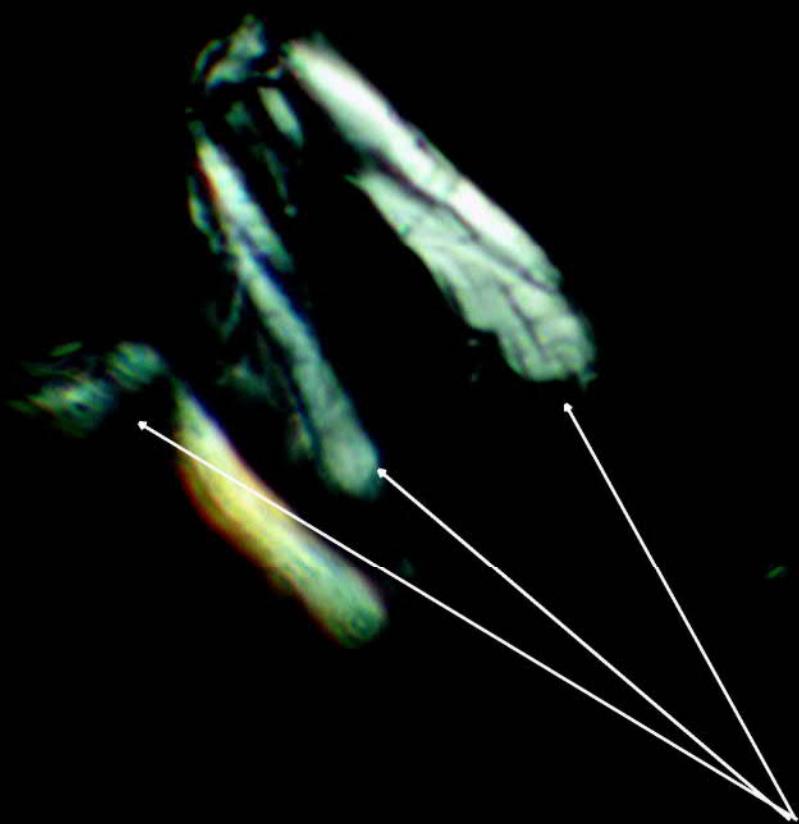




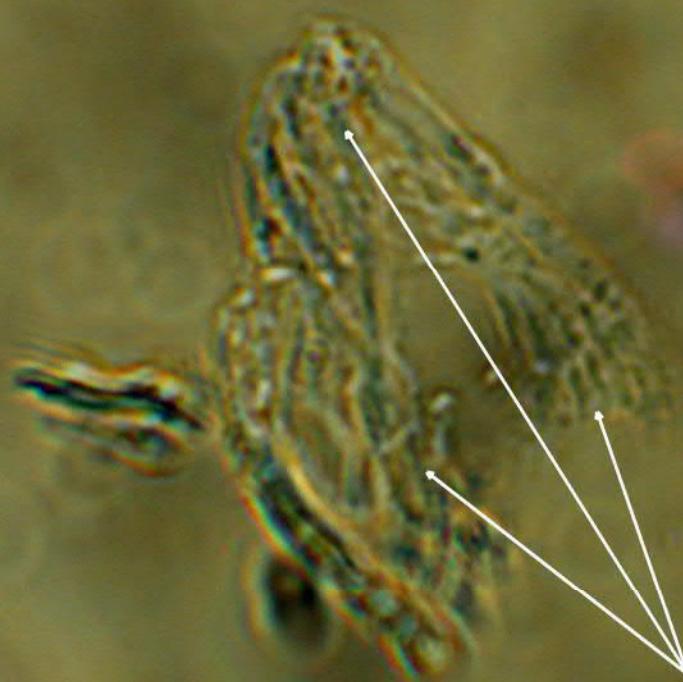
M70484-002HLM-001 Chrysotile-Talc
Perpendicular Dispersion



M70484-002HLM-001 Chrysotile-Talc
Elongation @ 400X



M70484-002HLM-001 Chrysotile-Talc
Crossed Polars

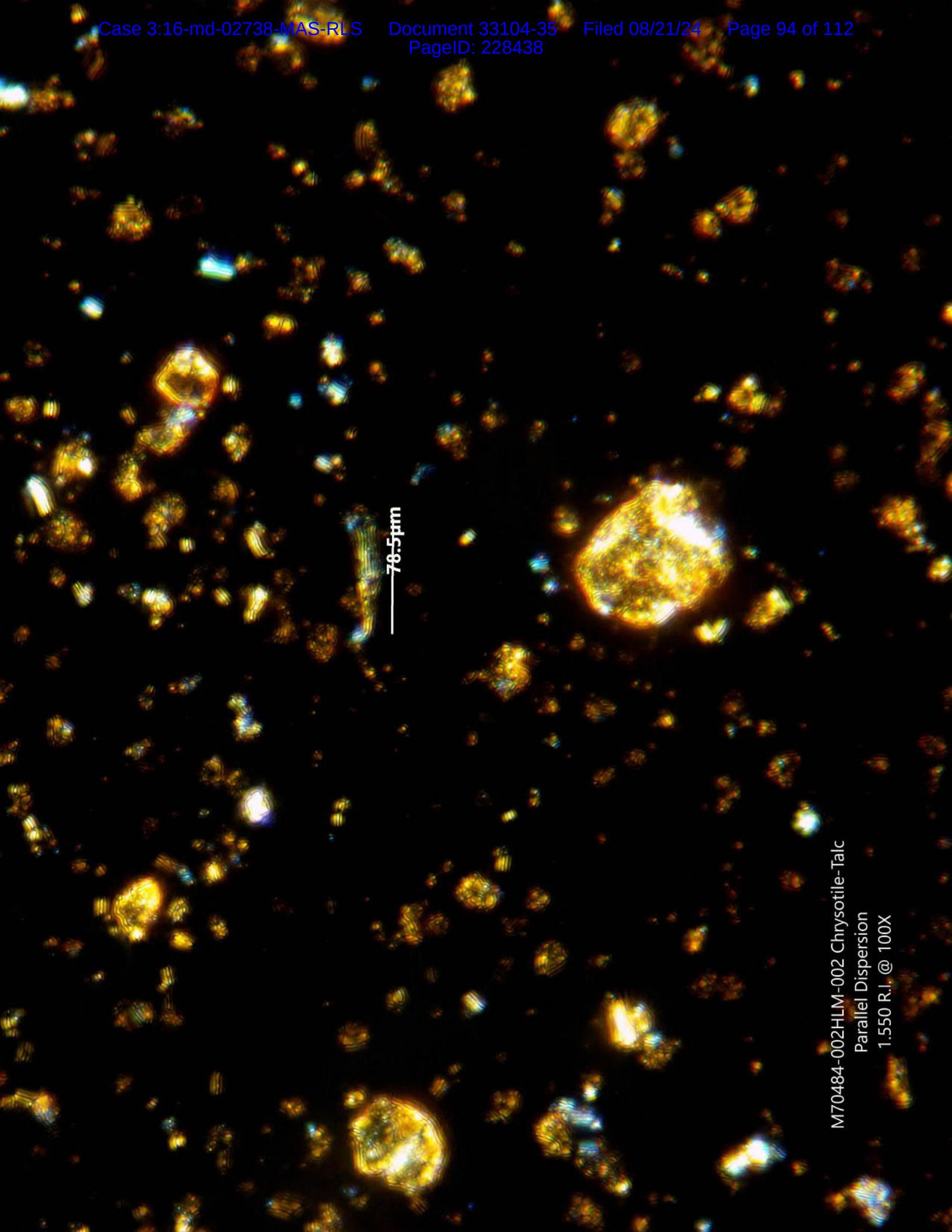


M70484-002HLM-001 Chrysotile-Talc

Polarizer out

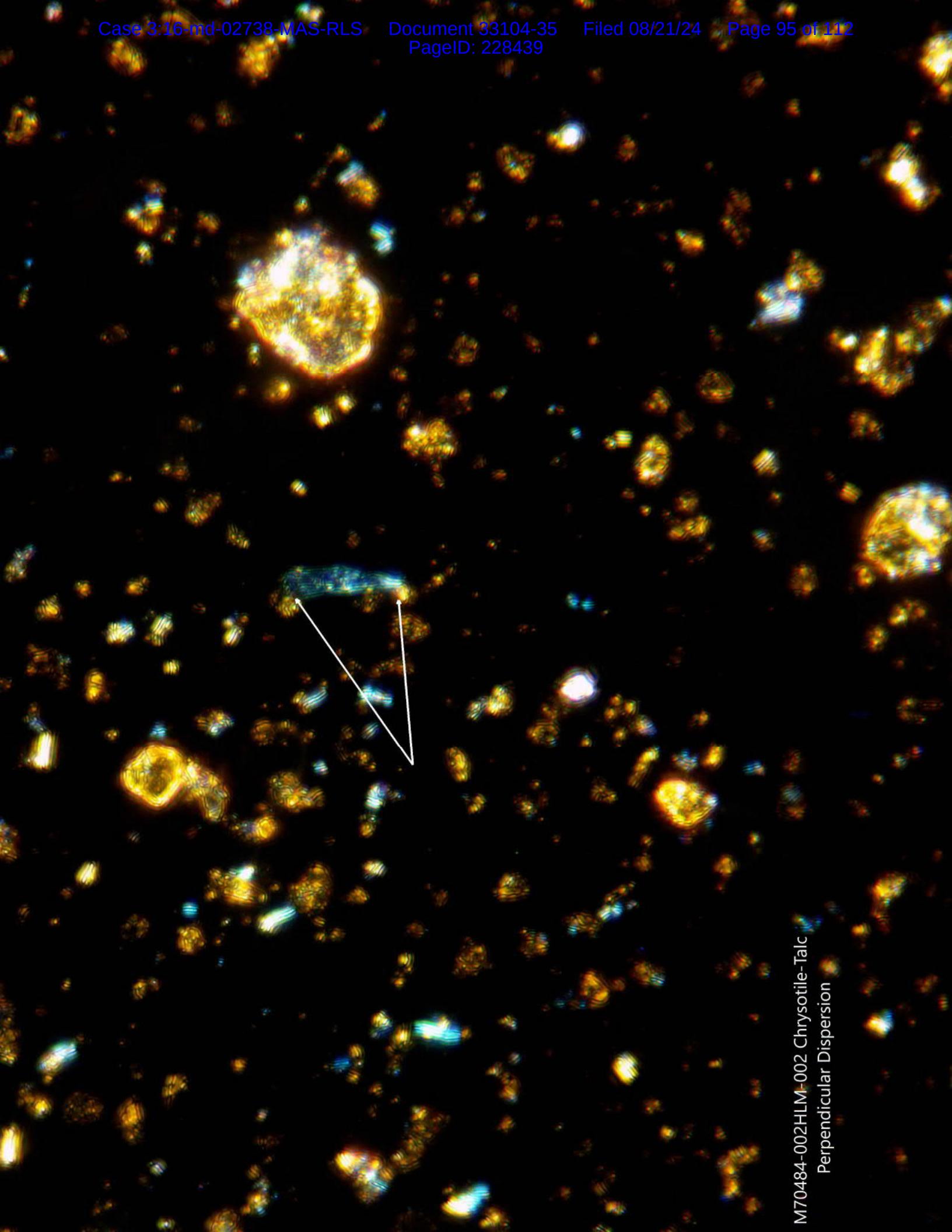
Aperture Diaphragm 95% closed

1.550 R.I. @ 400X

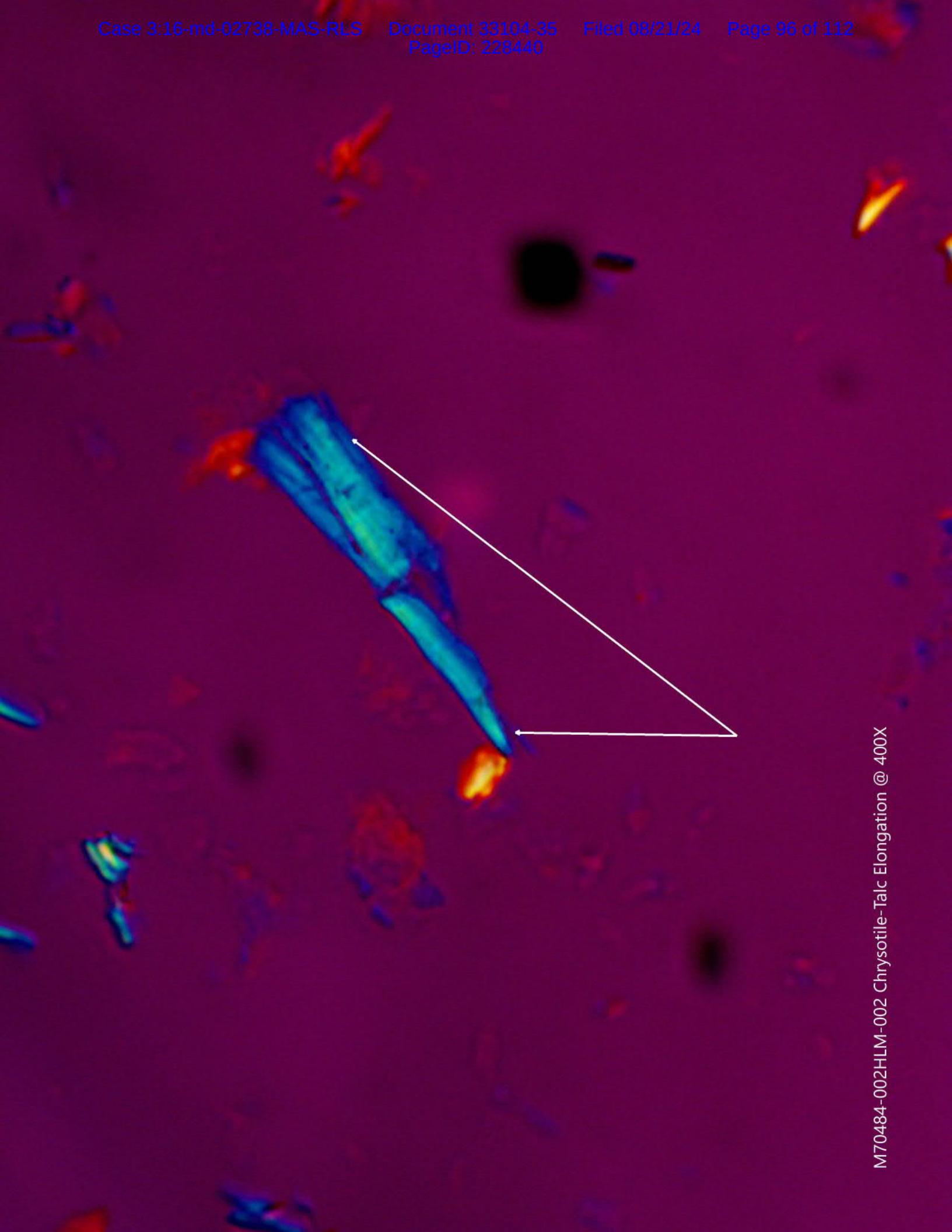


78.5 μ m

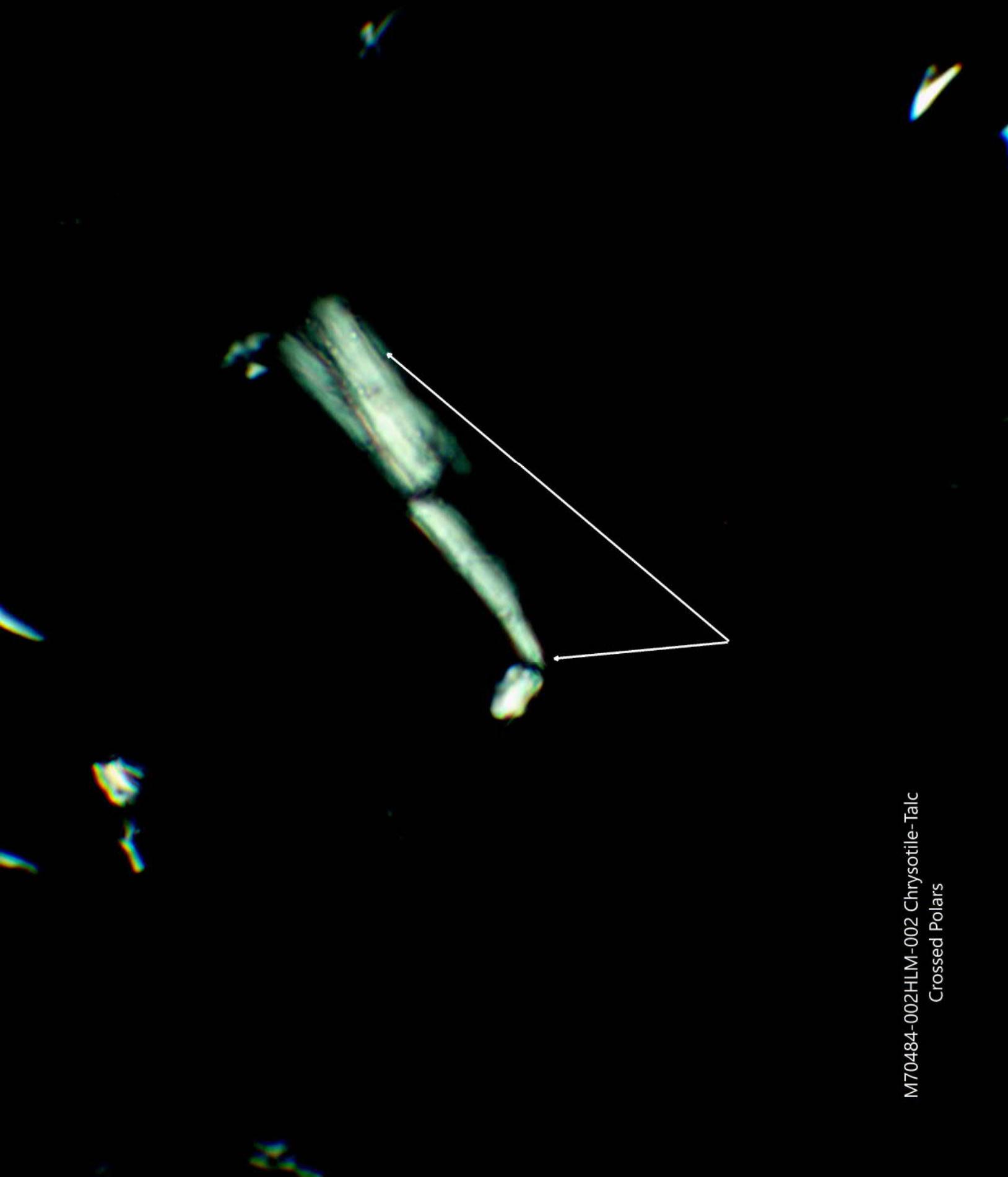
M70484-002HLM-002 Chrysotile-Talc
Parallel Dispersion
1.550 R.I. @ 100X



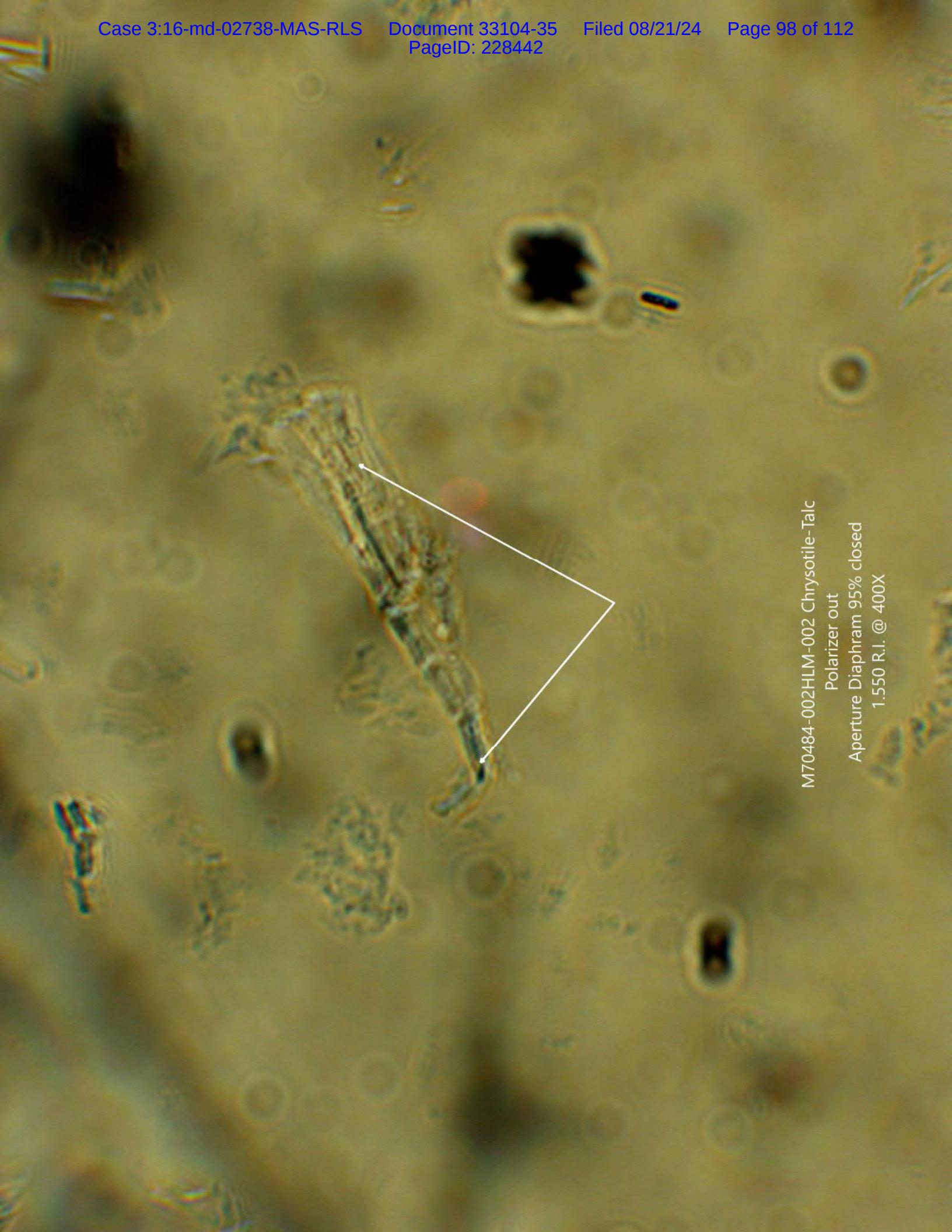
M70484-002HLM-002 Chrysotile-Talc
Perpendicular Dispersion



M70484-002HLM-002 Chrysotile-Talc Elongation @ 400X

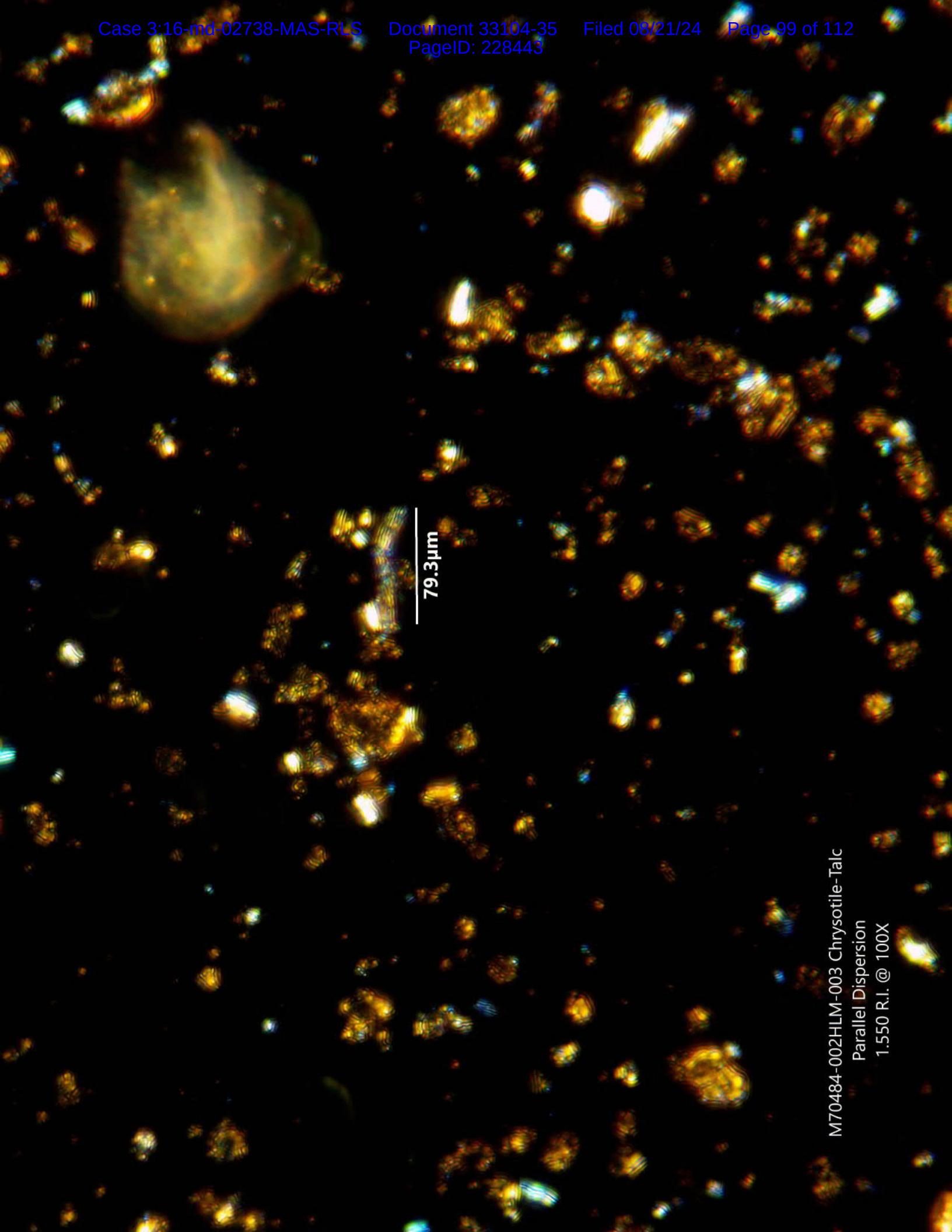


M70484-002HLM-002 Chrysotile-Talc
Crossed Polars



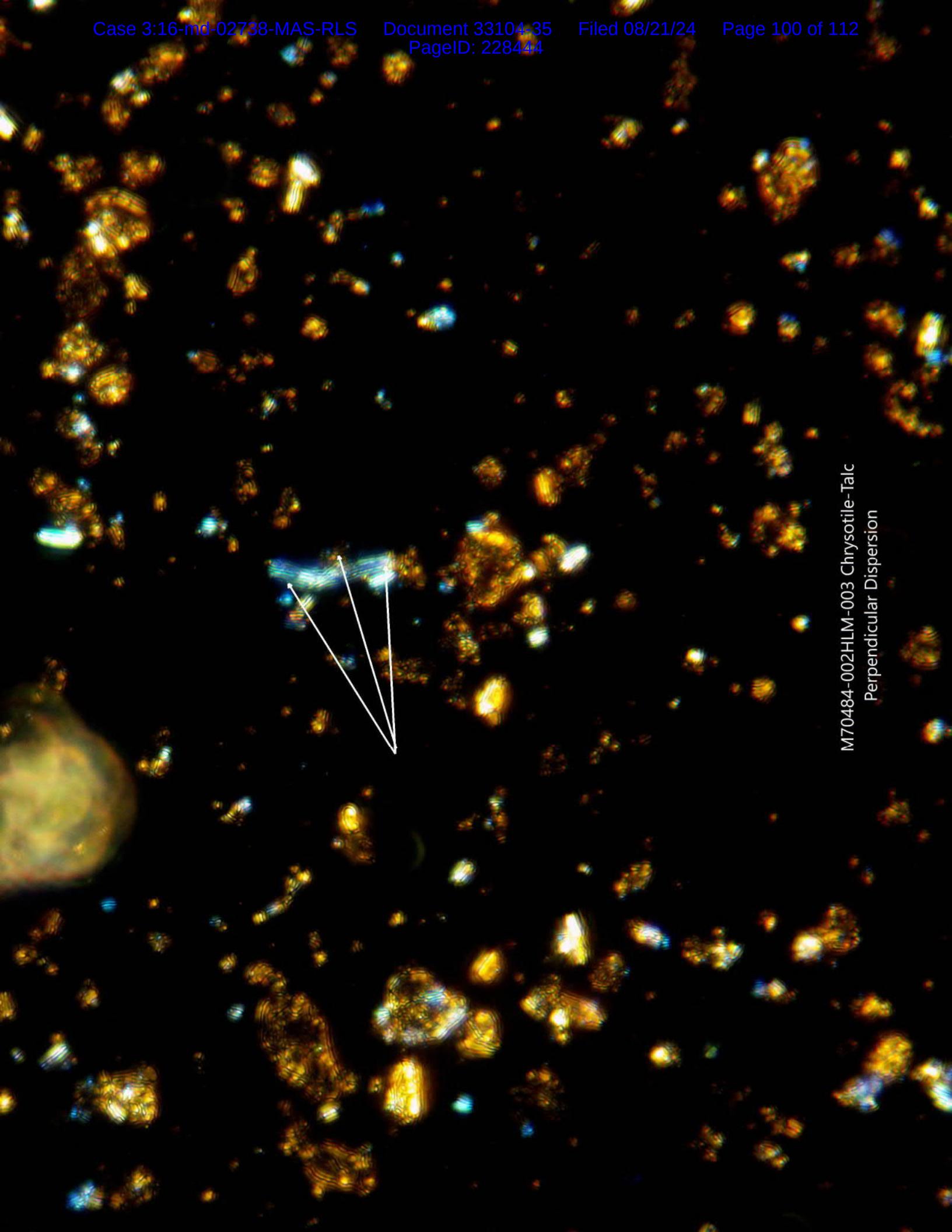
M70484-002HLM-002 Chrysotile-Talc
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X

A micrograph showing a single, elongated, light-colored mineral fiber against a darker, textured background. Two white arrows originate from the fiber's surface, one near its top left corner and another near its bottom right corner, both pointing towards the center of the fiber.



79.3 μm

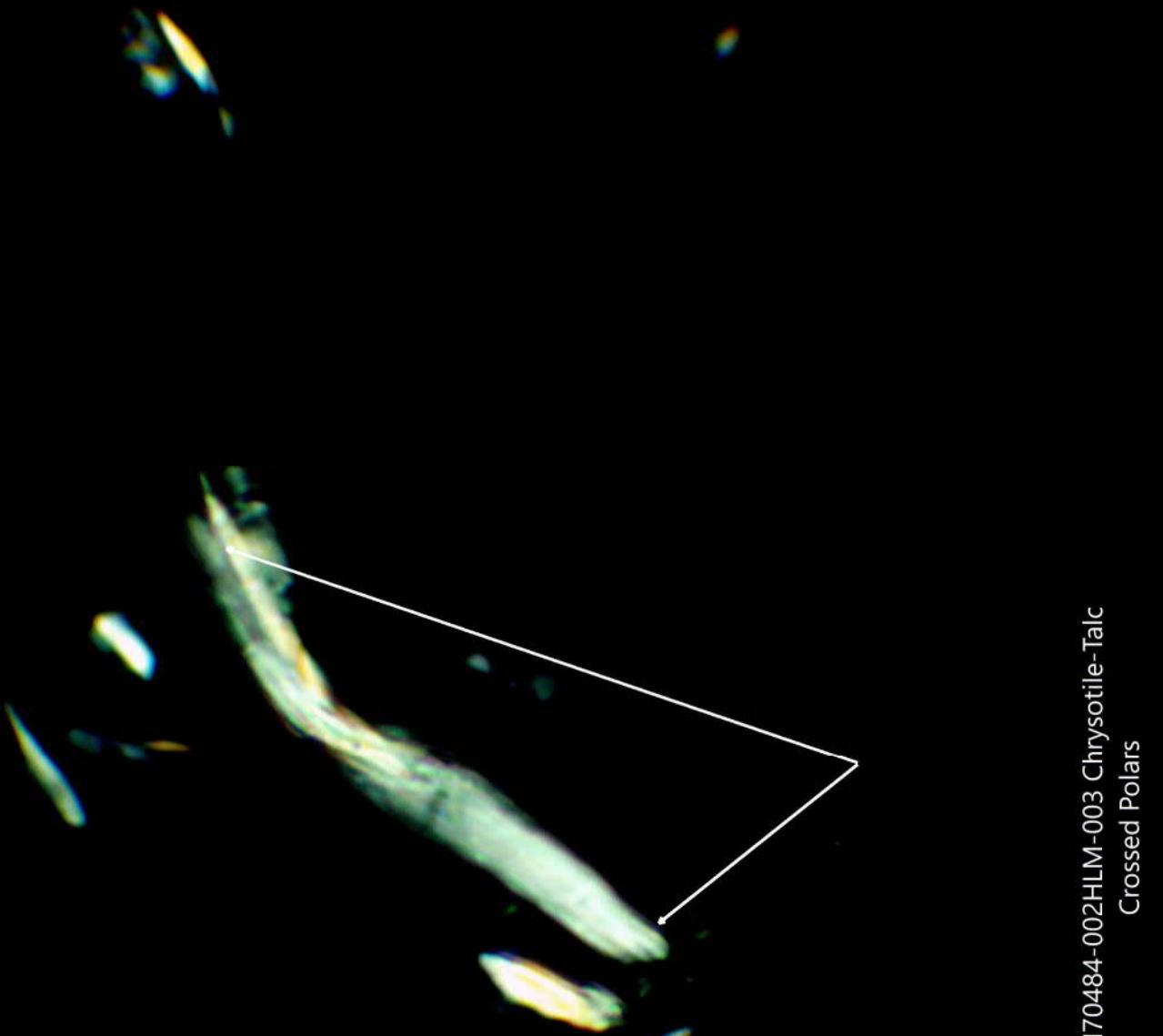
M70484-002HLM-003 Chrysotile-Talc
Parallel Dispersion
1.550 R.I. @ 100X



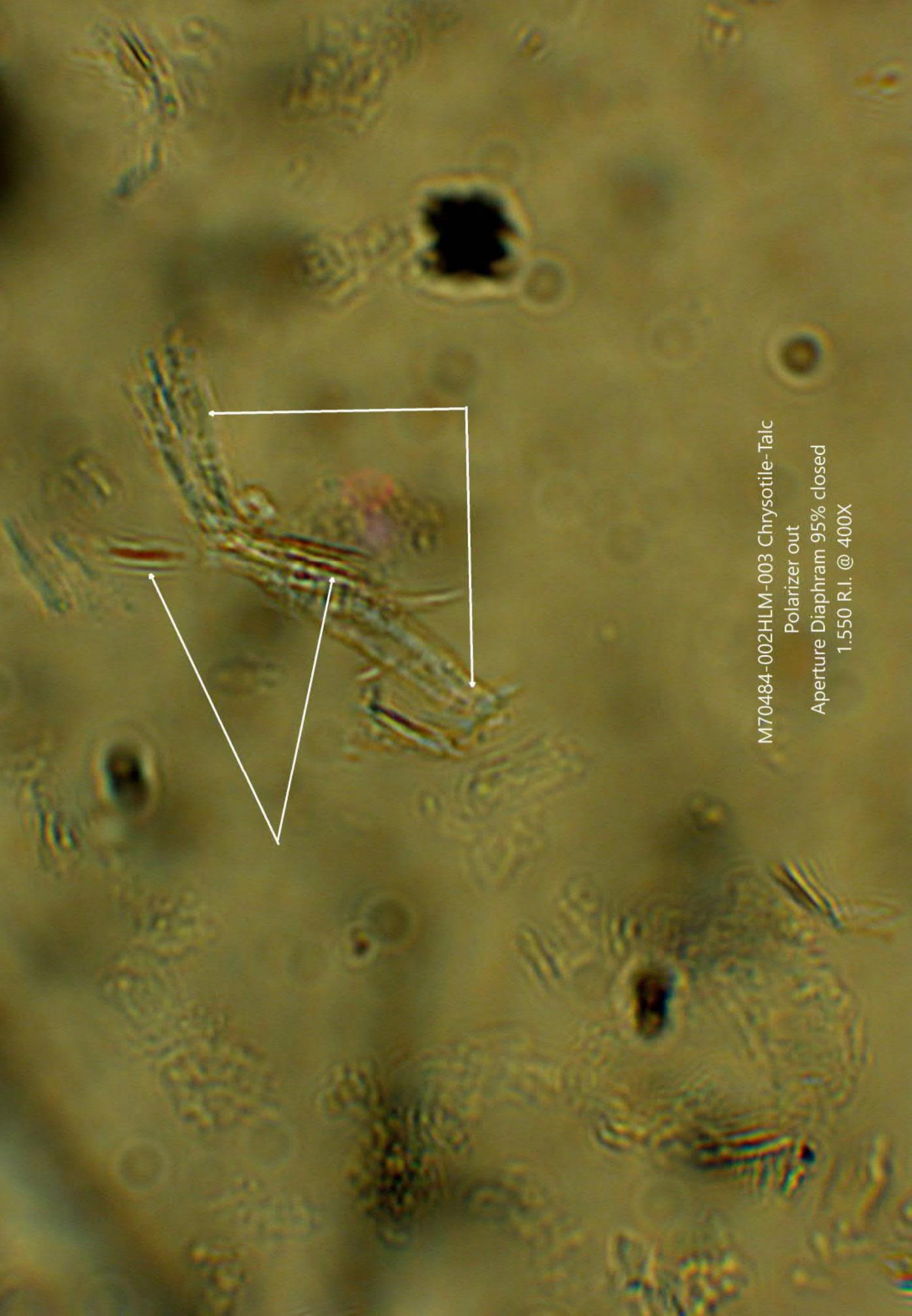
M70484-002HLM-003 Chrysotile-Talc
Perpendicular Dispersion



M70484-002HLM-003 Chrysotile-Talc
Elongation @ 400X



M70484-002HLM-003 Chrysotile-Talc
Crossed Polars



M70484-002HLM-003 Chrysotile-Talc
Polarizer out
Aperture Diaphragm 95% closed
1.550 R.I. @ 400X

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-002		Grid Box #	8668	No. of Grids Counted
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/29/2019		105	105	11025
Initial Weight(g)	0.03048		G. O. in microns =	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		
1.103					

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	D3-A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
NSD	F1							
NSD	F2							
NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							
NSD	H1							
NSD	H2							
NSD	H3							
NSD	H4							
NSD	H5							
NSD	H6							
NSD	H7							
NSD	H8							
NSD	H9							
NSD	H10							
NSD	I1							
NSD	I2							
NSD	I3							

TEM Bulk Talc Structure Count Sheet

TALC Talc Structure Count Sheet					
Project/ Sample No.	M70484-002	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/29/2019	G. O. in microns =	105	105	11025
Initial Weight(g)	0.03048		105	105	11025
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	D4-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							
NSD	G1							
NSD	G2							
NSD	G3							
NSD	G4							
NSD	G5							
NSD	G6							
NSD	G7							
NSD	G8							
NSD	G9							
NSD	G10							
NSD	I1							
NSD	I2							
NSD	I3							
NSD	I4							
NSD	I5							
NSD	I6							
NSD	I7							
NSD	I8							
NSD	I9							
NSD	I10							

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-002		Grid Box #	8668	No. of Grids Counted
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/29/2019		105	105	11025
Initial Weight(g)	0.03048		G. O. in microns =	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS

Org. Sample Wt.	Sample Wt.
	Post HL Separation
0.03048	0.03048 g
Percent of Orig. Post Separation	100 (%)
Wt. Of Sample Analyzed	0.00016710 g
Filter size	201.1 mm ²
Number of Structures Counted	0 Str.
Structures per Gram of Sample	<5,980 Str./g

Detection Limit	5.98E+03 Str./g
Analytical Sensitivity	5.98E+03 Str./g

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-002	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G.O. Area
Date of Analysis	7/29/2019	G. O. in microns =	105	105	105
Initial Weight(g)	0.03048		105	105	105
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	20%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		1.103

Str. #	Grid Opening	Str./Asb. Type	Length	Width	Ratio	SAED	EDS
NSD	D3-A2					No fibrous talc observed	

Section 5

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-000		Grid Box #	8668	No. of Grids Counted
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/23/2019		105	105	11025
Initial Weight(g)	N/A		105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	1%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		
1.103					

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	A5-A1							
NSD	A2							
NSD	A3							
NSD	A4							
NSD	A5							
NSD	A6							
NSD	A7							
NSD	A8							
NSD	A9							
NSD	A10							
NSD	B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
NSD	E3							
NSD	E4							
NSD	E5							
NSD	E6							
NSD	E7							
NSD	E8							
NSD	E9							
NSD	E10							

TEM Bulk Talc Structure Count Sheet

Project/ Sample No.	M70484-000	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/23/2019	G. O. in microns =	105	105	11025
Initial Weight(g)	N/A		105	105	11025
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	1%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		1.103

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS
NSD	B5-B1							
NSD	B2							
NSD	B3							
NSD	B4							
NSD	B5							
NSD	B6							
NSD	B7							
NSD	B8							
NSD	B9							
NSD	B10							
NSD	C1							
NSD	C2							
NSD	C3							
NSD	C4							
NSD	C5							
NSD	C6							
NSD	C7							
NSD	C8							
NSD	C9							
NSD	C10							
NSD	D1							
NSD	D2							
NSD	D3							
NSD	D4							
NSD	D5							
NSD	D6							
NSD	D7							
NSD	D8							
NSD	D9							
NSD	D10							
NSD	E1							
NSD	E2							
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NSD	E4							
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NSD	F3							
NSD	F4							
NSD	F5							
NSD	F6							
NSD	F7							
NSD	F8							
NSD	F9							
NSD	F10							

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-000		Grid Box #	8668	No. of Grids Counted
Analyst:	Jayme Callan		Length	Width	G. O. Area
Date of Analysis	7/23/2019		105	105	11025
Initial Weight(g)	N/A		105	105	11025
Analysis Type	Post Separation Talc Analysis		Grid Acceptance	Yes	Average
Scope No.	Accelerating Voltage	100 KV	Loading%	1%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		

Str. #	Grid Opening	Structure	Asbestos Type	Length	Width	Ratio	SAED	EDS

Org. Sample Wt.	Sample Wt. Post HL Separation
N/A	N/A g
Percent of Orig. Post Separation	N/A (%)

Wt. Of Sample Analyzed	N/A	g	Str.	Str./g	Str./g
Filter size	201.1	mm ²			
Number of Structures Counted	0				
Structures per Gram of Sample	N/A	Str./g			

Detection
Limit
Analytical
Sensitivity

TEM Bulk Talc Structure Count Sheet					
Project/ Sample No.	M70484-000	Grid Box #	8668	No. of Grids Counted	2
Analyst:	Jayme Callan		Length	Width	G.O. Area
Date of Analysis	7/23/2019	G. O. in microns =	105	105	105
Initial Weight(g)	N/A		105	105	105
Analysis Type	Post Separation Talc Analysis	Grid Acceptance	Yes	Average	11025
Scope No.	Accelerating Voltage	100 KV	Loading%	1%	G.O.s Counted
3	Screen Magnification	20 KX	Area Examined mm ²		1.103

Str. #	Grid Opening	Str./Asb. Type	Length	Width	Ratio	SAED	EDS
NSD	A5-A1					No fibrous talc observed	